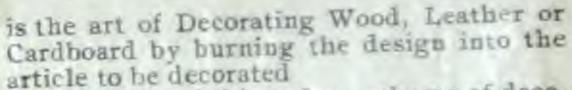
FROSTS ADAMS CO.

CATEO GUIE ARTISTS & MATERIALS



MATHEMATICAL INSTRUMENTS

37 CORNHILLS, BOSTON, MASS. YROGRAPHY: Poker Painting or Burnt Wood Etching



The origin of this unique scheme of decoration is not as obscure as might at first sight be supposed: in the days when art and conviviality went hand in hand in the Low Countries, and when in England the tavern was a club-house, it was the wont of artists who gathered over pipe and pot of a winter evening, to exercise their passing inspirations on the walls around them, as mementos of the festive occasion. A poker heated red in the fire-place was their tool. With it they sketched upon the wall the creations of their fancy, and the subject suggested by discussion - a memory of a scene of nature, an idea of a new style of ornament, and often portraits of each other

Pyrography is now executed by using a Platinum Point. Platinum being a perfect metal, on which no single seid has any effect, is the only metal suitable for the pyrographic point, as it has the peculiar property of absorbing the benzoline gas used for heating, and of feeding upon the vapor forced to the point by the rubber bellows. The interior arrangement of the point consists of a small platinum sheath, partially inclosing a fine coiled platinum

wire, which, extending some way beyond it, is again inclosed by the outer and larger sheath of the same metal. This is the "point" from which the heat is conveyed direct to the wood. The process may be applied not only to pictorial effects on wood, but to the ornamentation of leather, furniture, picture frames, screens, toilet articles, the covers of books, and many other things which will suggest themselves with practice and experiment. The owner of a country house in England has had the "Legend of Sleepy Hollow" done in pyrography on the woodwork of a fire-place, the rich sepia tints lending themselves beautifully to the poetic work. The panels of doors may be adorned with cupids and flowers, or any fancy design, the purity and delicacy of outline giving a charming appearance. Tables, chairs and screens are suitable for the exercise of taste and skill. Teaching, aside from practice, is of no avail in this simple art. Purchase the necessary outfit and with suggestions go to work; no more is needed as it depends on the student

We carry a Full Line of all Pyrography Requisites
FROST & ADAMS CO. 37 CORNHILL
BOSTON . . .

1914

ESTABLISHED



INCORPORATED

FROST & ADAMS CO.

Importers and Dealers in

ARTISTS' MATERIALS

Architects'
Engineers'
Draughtsmen's Supplies

Mathematical Instruments

Pyrography Requisites

CORNHILL

BOSTON, MASS., U.S.A.

HERBERT C. GARDNER, Pres. & Treas.

JOSEPH H. PEACOCK, Vice Pres.

HAROLD GARDNER, Clerk

DIRECTIONS

PARTIES unknown to us should accompany their orders with the money, or give us convenient and satisfactory references as to their financial standing

When goods are forwarded by express with C. O. D. bill the Express Company's charge for collecting money and returning same will be added to said bill

Merchandise not injurious to the mails and not exceeding eleven pounds in weight, can be forwarded to any part of the United States on prepayment of postage, at the ruling rates of Parcel Post which you can get by inquiring at your home Post Office

Liquids and oil colors can be sent by mail

The best and surest way of remitting money is by bank draft or Post Office order, made payable to us

Goods will be packed with the utmost care for mail, express, freight or otherwise; but all packages must be at the risk of the purchaser after leaving our hands except by special agreement

FROST & ADAMS CO.

N. B. The American Express Co. Money Order System is one of the best means of remitting

WINSOR & NEWTON'S

ARTISTS' OIL-COLORS

st st st

The world-wide circulation which has long been a distinguishing feature of Winson & Newton's Oil Colors testify convincingly to the repute in which they are held, and renders a description of their characteristics somewhat superfluous. In the production of these colors no pains or expense is spared to insure that the pigments used are the most brilliant and durable that can be manufactured, and that the oils in which the pigments are ground are of the purest and most perfect quality

Orinding colors by machinery was first introduced by Winson & Newton in 1840, special apparatus being invented by them for the purpose. Since that period many further improvements have been made in the original Mills; and it is believed that at present there exists no machinery which, for power and precision, combined with great clean-liness in working, can at all compare with that invented, perfected, and now used by them in the production of their Artists' Oil Colors

Exhaustive tests which are constantly being made at the North London Color Works, in which Winson & Newton's Oil, Colors are examined in conjunction with those of other makers, invariably establish the fact that, alike in power and brilliancy of Color, perfection of grinding, excellence of consistency, and — most important of all—in durability under varying conditions, Winson & Newton's Oil, Colors occupy a pre-eminent position

COMPOSITION OF PIGMENTS PREPARED BY WINSOR & NEWTON

And used by them in the manufacture of their Oil and Water Colors

Alizarin Carmine Alizarin Crimson Alizarin Scarlet Lakes prepared from artificial Alizarin. The lakes prepared from this coloring matter do not approach in beauty of color those obtained from the genuine Madder Root

Alizarin Green Alizarin Orange Alizarin Yellow These new pigments resemble the preceding in being Lakes prepared from Coal Tar dyes of similar
origin. Alizarin Green is similar in color to the
pigment known as "Sap Green" by the old painters, for which, as it is much more permanent, it
forms a valuable substitute

Antwerp Blue

A weak variety of Prussian Blue containing Alumina

Asphaltum

Mineral Pitch obtained from Egypt

Aureolin

Double Nitrite of Cobalt and Potassium. This color, originally introduced by us, has always been a specialty of ours

Aurora Yellow

An opaque and brilliant variety of Sulphide of Cadmium introduced by us in 1889, and peculiar to ourselves. It vies with genuine Ultramarine in its combination of exquisite beauty with unflinching durability. Aurora Yellow is of much denser body than the ordinary Cadmiums, and a better drier in Oil. Artists are invited to match it as nearly as possible—say on a china palette—with Chrome Yellow (the only other yellow approaching it in brightness and opacity) and then to compare the two after a few months' exposure

Azure Blue

A synonym for Cobalt

Bistre

A brown soot obtained from Wood, and used only in Water Color

Bilumen

Synonymous with Asphaltum

Black Lead

Prepared Graphite

Blue Black

A variety of Carbon Black, prepared by charring woody tissue

Bone Brown

Charred Bone Dust

A Book giving full descriptions of all Colors will be furnished on application.

Composition of Pigments, W. & N. - continued from page 4

Brilliant Ultra- The finest brand of French Ultramarine obtain-

Bronze A mixed Chrome Green, used only in Water Color

Brown Madder Lake prepared from the Madder Root

Brown Ochre Native Earth. This color is valued for its rough

appearance by water-color artists

Brown Pink Lake made from Quercitron Bark

Burnt Carmine A color obtained by charring Cochineal Carmine

Burnt Lake Formerly obtained by heating Crimson Lake; a more permanent variety is now prepared from Madder Lake

Burnt Roman Ochre Calcined Native Earth

Burnt Sienna Calcined Raw Sienna

Burnt Umber Calcined Raw Umber

Cadmium Yellow, extra Pale

Cadmium Yellow, Pale

Cadmium Yellow, Middle

Cadmium Yellow,

Cadmium Orange

Different varieties of Sulphide of Cadmium. They differ from Aurora Vellow in possessing a certain amount of transparency

Caledonian Brown

The original Caledonian Brown being no longer obtainable, a close imitation is prepared from Sienna and Vandyke Brown

Cappagh Brown

A native earth containing Manganese in notable quantity. Many years ago the mine was exhausted and the whole of the market was bought up at the time by Messrs. Winsor & Newton, who now hold a large and valuable stock of this magnificently-drying color

Carmine No. 2

Lakes prepared from Cochineal

Cassel Earth

Synonymous with Vankyke Brown

Cerulean Blue.

Stannate of Cobalt

Charcoal Gray.

The composition of this color is expressed by its

Composition of Pigments, W. & N. - continued from page 5

Chinese Blue Synonymous with Prussian Blue

Chinese Orange Synonymous with Alizarin Orange

Chinese Vermilion The genuine article imported from China

Chinese White

A specially dense variety of Oxide of Zinc, used only in Water Color. Chinese White was first introduced by us and is still one of our great specialties. It should be noted that ordinary Zinc White is often sold as Chinese White;

buyers should therefore test it for covering power on a piece of black paper

Chrome Greens Preparations of Chrome Vellow and Prussian Blue

Chrome Lemon A combination of Chromate and Sulphate of Lead

Chrome Yellow Normal Chromate of Lead.

Chrome Orange
Chrome Red

Chro

Cinnabar Greens Similar in composition to Chrome Greens; but a deeper variety of Chrome Yellow is employed

Citron Vellow Chromate of Zinc

Coball Blue is unusually free from a tendency to become greenish on exposure

Cobalt Green, No. 2 | Zinc Oxide tinctured with Oxide of Cobalt

Cobalt Violet A new pigment with a Cobalt base

Cobalt Yellow Synonymous with Aureolin

Cologne Earth Calcined Vandyke Brown

Constant White Barium Sulphate. Used only in Water Color

Cork Black A variety of Carbon Black, obtained by charring

Cremnitz White Basic Carbonate of Lead

Crimson Lake A Lake prepared from Cochineal

Crimson Madder A Lake prepared from the Madder Root

Cyanine Blue A synonym for Leitch's Blue

COMPOSITION OF WINSOR & NEWTON'S VEHICLES

Amber Varnish. Genuine Amber dissolved in drying oil, and thinned with turpentine. "Pale Amber Varnish" is prepared with a special view to paleness of color, but is otherwise similiar in composition

Oil Copal Varnish. Prepared as above, with Copal in place of Amber. No guarantee, however, is given as to which of the many varieties of Copal are used. A very elastic and durable, but rather slow in drying Varnish

Picture Copal Varnish. A pale "Oil Copal Varnish" manufactured specially for Artists, and guaranteed to be made only with the finest Sierra Leona Copal. Dries much more rapidly than "Oil Copal"

N.B. — "Oil Copal" is thought to be the best for mixing with colors, and "Picture Copal" for varnishing finished pictures. "Picture Copal" is also very largely used for the former purpose, but requires caution in using, as it is more liable to crack than Oil Copal when it enters too largely into the composition of the painting medium

Mastic Varnish. A solution of genuine Gum Mastic in purified turpentine, made of the proper consistency for making Megilp when mixed with an equal volume of "Pale Drying Oil," but is too strong for varnishing pictures

Picture Mastic Varnish. A thinner variety of the preceding. It is of the right strength for varnishing pictures, but is not stout enough to make good Megilp

Manganesed Linseed Oil. Purified Linseed Oil containing a small percentage of Oxide of Manganese. The oil is thus rendered highly siccative Manganesed Poppy Oil. A precisely similiar preparation made with Poppy Oil

Medium. A carefully prepared composition of Drying Oil, Mastic Varuish and Copal Varnish

Megilp. A combination of Pale Drying Oil and Mastic Varnish Pale Drying Oil. Linseed Oil prepared with Oxide of Lead

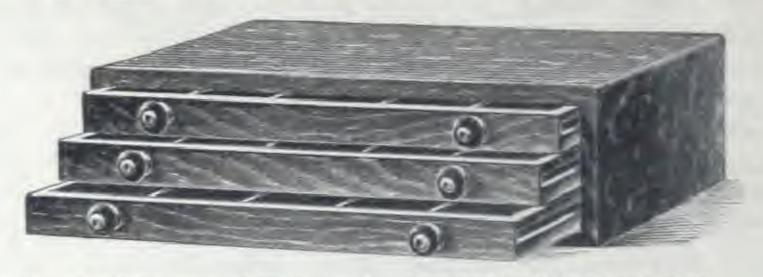
Petroleum, or "Essence de Petrole." A volatile spirit obtained from Petroleum or "Rock Oil," and specially prepared for use by Artists as a substitute for Turpentine. It is thinner, and more penetrating in its nature than the latter, evaporates more rapidly, and leaves no sticky residue. It is also destitute of the pungent odor which renders turpentine so distasteful to many painters

Purified Linseed Oil. Linseed Oil clarified by two or three years' exposure to sunlight

Purified Poppy Oil. Poppy Oil clarified by two or three years' exposure to sunlight

Strong Drying Oil. Linseed Oil with the Oxides of Lead and Manganese

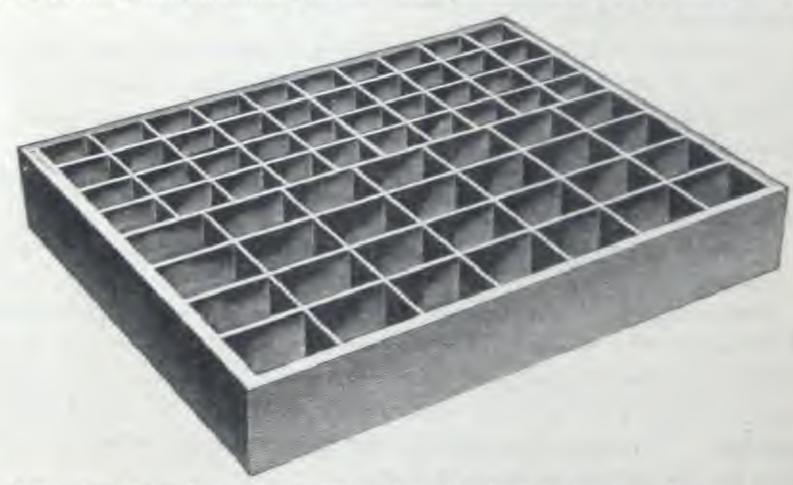
FROST & ADAMS CO'S WATER COLOR AND BRUSH CABINETS



FROST & ADAMS CO'S

TUBE RACK FOR OIL COLORS

Made of Hard Wood, Shellac Finish. Compartments Fit any Make of Tubes



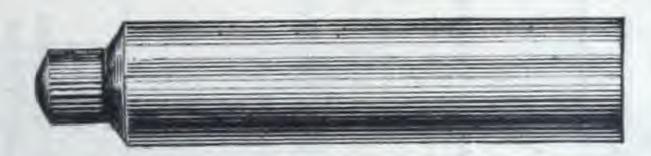
Size of Rack, 25 inches long, 20 inches high, 4 1/4 inches deep, 28 partitions 3 1/4 × 2 3/8 × 4, and 40 partitions 2 1/4 × 1 3/4 × 4 each, \$3.75

Dealers ordering Assortment of Artists' Oil Colors in tubes, of Winsor & Newton's manufacture, will be furnished with a Tube Rack free Compartments hold a dozen tubes of each Color

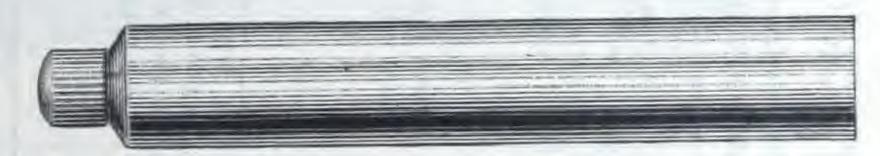
EMPTY COLLAPSIBLE TUBES

For Artists' Colors, Cosmetics, Tooth Pastes, Salves, Printing Ink, Cements, Etc.

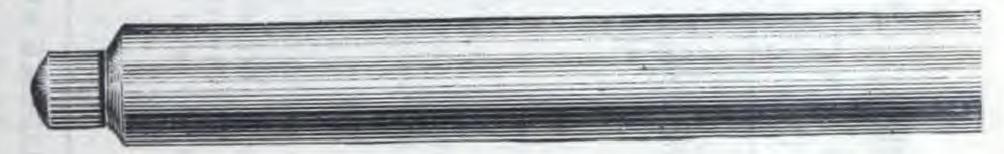
Furnished to Order Only—at Short Notice



No. 1 1/2 x 2% Inches



No. 2 1/2 x 3% Inches



No. 3 1/2 x 4% Inches

No	Size (Inches)	H	olds	Quantity in Box	Net Per Gross	No.		Size sches)	Н	olds	Quantity in Box	Net Per Gross
1.	1/2 × 23/8		dr.	1 gr.	\$2.25	5.	1	X 41/2	11/2	oz,	½ gr.	\$6.25
2.	1/2 × 33/8		dr.	1 gr.	2.40	6.	1	× 63/8	2	oz.	½ gr.	9.00
3.	1/2 × 43/8		1		2.80	7.	14	X 61/2	31/2	oz.	½ gr.	13.00
4.	14×43/8			1 gr.	4.25	8.	1%	×6 58	5	oz.	¼ gr.	17.25
Pli	ers for Cl	osin	g Tu	bes							per pair	\$1.50

In closing the end of the Tube after filling, the metal should be brought tightly together and lapped twice; the smaller sizes, one-eighth inch for each lap; the larger, one-quarter inch

PLAN OF A COLORED CHART FOR OIL-PAINTING

Illustrating Combinations of WINSOR & NEWTON'S Oil Colors, and showing an easy method of Mixing and Blending into Tints. Painted by Mr. FREDERICK OUGHTON

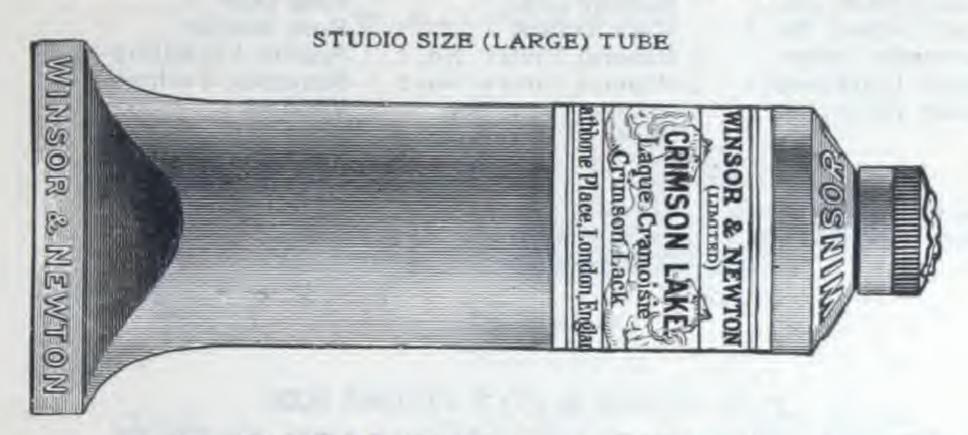
Ivory Black Raw Umber and White	Permanent Mauve and White	Cobalt Emerald Green Naples Yellow and White
Vermilion and Aurora Vellow	Brown Madder and White	Cobalt Raw Sienna and White
French Blue and Alizarin Crimson	Burnt Sienna and White	Prussian Blue Vellow Ochre and White
Cobalt, Naples Vellow and White	Light Red and White	Prussian Blue, Cappah Brown and White
Ivory Black and White	Vandyke Brown, Vermilion and White	Ivory Black and Aurora Vellow
Cobalt, Light Red and White	Vermilion Naples Yellow and White	Prussian Blue and Cadmium Vellow
Cobalt, Rose Madder, Yellow Ochre and White	Rose Madder, Vermilion, Naples Vellow and White	Prussian Blue Raw Sienna and Aurora Vellow

A MOST POPULAR, VALUABLE AND INTERESTING COLOR CHART

Size 14 x 8 inches. Each, .50

WINSOR & NEWTON'S

FINELY PREPARED OIL COLORS FOR ARTISTS



CLASS A

Each, .30

Blue Black
Burnt Sienna
Burnt Umber
Chrome Lemon
Chrome Yellow
Chrome Orange
Cinnabar Green, Light
Cinnabar Green, Middle

Cinnabar Green, Deep Emerald Green Gold Ochre Indian Red Ivory Black Light Red Naples Yellow Prussian Blue Raw Sienna
Raw Umber
Terre Verte
Iransparent Gold Ochro
Vandyke Brown
Venetian Red
Yellow Lake
Yellow Ochro

CLASS B

Flesh Tint Mauve New Blue Permanent Blue

Each, .60

Sap Green Scarlet Lake Sky Blue

CLASS C

Each, .75

Alizarin Crimson Alizarin Green Alizarin Scarlet Erown Madder

Cappagh Brown

Crimson Lake

Cyprus Umber

Cerulean Blue Chinese Vermilion French Vermilion Geranium Lake Permanent Crimson

Spectrum Red Spectrum Violet Spectrum Vellow Vermilion

Winsor & Newton's Oil Colors - continued

CLASS D

Cobalt Blue Cobalt Green, No. 1 Cobalt Green, No. 2 Emerande Green French Ultramarine Indian Yellow Lemon Vellow
Madder Lake
Mars Vellow
Mineral Violet, No. 1
Mineral Violet, No. 2
Orange Vermilion
Oxide of Chromium

Oride of Chromium, Transparent Rose Doré Rose Madder Scarlet Vermilion Strontian Yellow Viridian

CLASS E

Aureolin (Cobalt Tellow) Cadmium Yellow, Extra Pale Cadmium Pale Cadmium Middle Cadmium Deep

Cadmium Orange

Each, \$1.50

Each, \$1.20

Carmine

CLASS F

Aurora Vellow

Each, \$2,50

F. W. DEVOE & CO.'S STUDIO SIZE FINELY PREPARED OIL COLORS FOR ARTISTS

CLASS A

Blue Black
Burnt Sienna
Burnt Umber
Chrome Yellow, Lt.
Chrome Yellow, Med.
Chrome Yellow, Deep
Chrome Orange
Emerald Green
Indian Red

Ivory Black
Light Red
Naples Yellow, Lt.
Naples Yellow, Med.
Naples Yellow, Deep
Prussian Blue
Raw Sienna
Raw Umber
Terre Verte

Transparent Gold Othre
Van Dyke Brown
Venetian Red
Yellow Lake
Yellow Ochre
Zinnober Green, Lt.
Zinnober Green, Med.
Zinnober Green, Deep

CLASS B

Crimson Lake Mauve New Blue Permanent Blue

Scarlet Lake Each, .55

Alizarin Crimson Alizarin Green Alizarin Scarlet

Brown Madder Chinese Vermilion English Vermilion French Vermilion Geranium Lake Harrison Red

CLASS D

CLASS C

Cobalt Blue Emeraude Green Indian Yellow Lemon Yellow

Madder Lake Orange Vermilion Oxide of Chromium Rose Madder Each, .80

Each, .40

Sup Green

Scarlet Vermilion Ultramarine Viridian

CLASS E

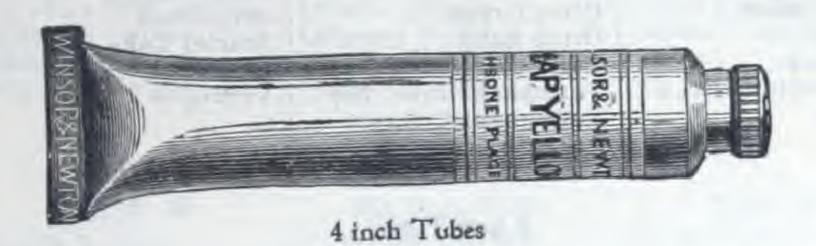
Cadmium Lemon Cadmium Pale Cadmium Vellow Cadmium Orange Cadmium Deep Each, \$1,25

Cerulean Blue French Carmine

WINSOR & NEWTON'S

PREPARED OIL COLORS FOR ARTISTS

IN COLLAPSIBLE TUBES



CLASS A

Antwerp Blue Asphaltum Ritumen Black Lead Blue Black Bone Brown Brown Ochre Brown Pink Burnt Roman Ochre Burnt Sienna Burnt Umber Caledonian Brown Cassel Earth Charcoal Gray Chinese Blue Chrome Green, No. 1 Chrome Green, No. 2 Chrome Green, No. 3 Chrome Lemon Chrome Yellow Chrome Deep Chrome Orange Cinnabar Green, Pale Cinnabar Green, Light Cinnabar Green, Olive Cinnabar Green, Middle Cinnabar Green, Deep Cologne Earth

Per Doz., \$1.50

Cool Roman Ochre

Copal Megilp, No. 1 Copal Megilp, No. 2 Cork Black Cremnitz White Davy's Gray Emerald Green Flake White, No. 1 Flake White, No. 2 Flake White, Slow Drying Gold Ochre Indian Red Indigo Italian Pink Ivory Black Jaune Brillant King's Yellow Lamp Black Light Red Medium (Copal Megilp) No. 1 Medium (Copal Megilp) No. 2 Megilp Monochm Tint, Cool No. 1 Mouochm Tint, Cool No. 2 Monochm Tint, Cool No. 3 Monochm Tint, Warm Na. 1 Monochm Tint, Warm No. 2 Monochm Tipt, Warm No. 3 Mummy

Each, .08 Net

Naples Vellow Naples Yellow, French Neutral Tint Orpiment Oxford Ochre Payne's Gray Permanent White Prussian Blue Prussian Green Pyne's Megilp Raw Sienna Raw Sienna, Pale Raw Umber Roman Ochre Silver White Silver White, No. 2 Sugar of Lead Terra Rosa Terre Verte Terre Verte, Olive Shade Transparent Gold Ochre Vandyke Brown Venetian Red Verona Brown Yellow Lake Yellow Ochre Yellow Ochre, Pale Zinc White

Winsor & Newton's Oil Colors - continued

2 inch Tubes

CLASS A-2

Cappagh Brown
Chrome Red
Crimson Lake
Cyprus Umber
Gamboge
Indian Lake
Lemon Yellow, No. 2
Magenta

Per Doz., \$1,50

Mauve, No. 2
New Blue
Olive Green
Olive Lake
Permanent Blue
Permanent Blue
Permanent Crimson

Each, .08 Net

Permanent Vellow Prussian Brown Purple Lake Sap Green Scarlet Lake Sky Blue Verdigris

2 inch Tubes

CLASS B

Alizarin Carmine
Alizarin Crimson
Alizarin Green
Alizarin Orange
Alizarin Scarlet
Alizarin Yellow
Brown Madder
Carmine Lake
Cerulean Blue
Chinese Orange
Chinese Vermilion

Per Doz., \$2.40

Crimson Madder (Alizaria)
French Vermilion
Geranium Lake
Green Lake, Light
Green Lake, Deep
Madder Carmine (Alizaria)
Malachite Green, No. 2
Mineral Gray
Orange Madder (Alizaria)
Purple Madder (Alizaria)
Rembrandt's Madder

Each, .18

Rose Madder (Alizaria)
Rubens' Madder
Ruby Madder (Alizaria)
Scarlet Madder (Alizaria)
Sepia
Spectrum Red
Spectrum Violet
Spectrum Vellow
Vermilion, Pale
Vermilion

2 inch Tubes

CLASS C

Brilliant Ultramarine
Burnt Lake
Carmine, No. 2
Citron Yellow
Cobalt Blue
Cobalt Green
Cobalt Green, No. 2
Cobalt Violet
Cyanine Blue
Emend Oride of Chromium
Emerande Green
Extract of Vermilion
French Ultramarine
French Veronese Green

Per Doz., \$4.20

Indian Yellow
Leitch's Blue
Lemon Yellow, Pale
Lemon Yellow
Madder Lake
Malachite Green
Mars Brown
Mars Orange
Mars Red
Mars Violet
Mars Yellow
Mineral Violet
Mineral Violet, No. 2
Orange Vermilion

Each, .28

Oxide of Chromium, Transparent
Permanent Mauve
Permanent Violet
Pink Madder
Primrose Yellow
Purple Madder
Rose Doré
Rose Madder
Rose Madder
Rose Madder
Scarlet Madder
Scarlet Vermilion
Strontian Yellow
Viridian

Winsor & Newton's Oil Colors - continued

2 inch Tubes

CLASS D

Aureolin
Burnt Carmine
Cadmium Yellow, Extra Pale
Cadmium Yellow, Pale
Cadmium Yellow, Middle Opaque
Cadmium Yellow, Deep

Per Doz., \$6.60

Cadmium Orange Carmine Cobalt Yellow Crimson Madder Field's Orange Vermilion Indian Purple Each, .40

Madder Carmine Orient Vellow Violet Carmine Vellow Carmine

2 inch Tubes

CLASS E Aurora Yellow Per Doz., \$9.00 Primrose Aureolin

Each, .80 | Ultramarine Ash

2 inch Tubes

CLASS F

Per Doz., \$12.00

Each, \$1.40 Extra Ultramarine Ash

Extra Madder Carmine | Extra Purple Madder

Double Tubes

PerDoz.,\$3.00 Each,.16 Net Cremnitz White Flake White, No. 1 Flake White, No. 2 Flake White, 8low Drying Silver White Silver White Silver White, No. 2 Zinc White Medium (Copal Megilp) No. 1 Medium (Copal Megilp) No. 2 Megilp Treble Tubes

Per Doz., \$4.50 Each, 24 Net Cremnitz White Flake White, No. 1 Flake White, No. 2 Flake White, \$10w Drying Silver White Silver White, No. 2 Zinc White Half-pound Tubes

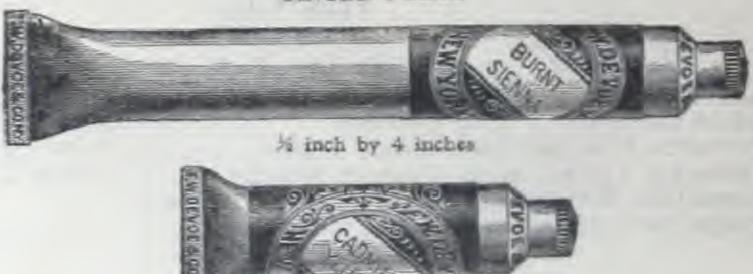
Per Doz., \$6.00 Each, .32 Net Cremnitz White Flake White, No. 1 Flake White, No. 2 Flake White, Slow Drying Silver White Silver White, No. 2 Zinc White

WINSOR & NEWTON'S "WINTON" WHITE

Winton White, double tubes		100	per doz	, \$1.50 e	ach	.10
Winton White, half pound tubes	2.1	1.		3.00	**	.20
Winton White, one pound tubes	4		**	6.00	-	.40
Winton White, two pound tubes	1	-	14	10.00	10	.80

F. W. DEVOE & CO.'S PREPARED OIL COLORS

SINGLE TUBES



CLASS A

American Vermilion Antwerp Blue Asphaltum Bistre Bitumen Blue Black Bone Brown Brilliant Vellow Brown Ochre Brown Pink Burnt Umber Burnt Roman Ochre Burnt Sienna Burnt Terre Verte Caledonian Brown Cappah Brown Cassel Earth Cork Black Copal Megilp Chrome Green, 1-L Chrome Green, 2-M Chrome Green, 3-L Chrome Yellow, 1-L Chrome Vellow, 2-M Chrome Vellow, 3 - D Chrome Orange Chrome Red China White Chinese Blue Cologne Earth Cremnitz White Crimson Lake Emerald Green Plake White

Per Doz., ,90

% inch by 2 inches

French Green French Naples Vellow Flesh Ochre Gamboge Gold Ochre Geranium Lake Greenish Nap. Vellow Indian Lake Indian Red Indigo Italian Pink Ivory Black King's Yellow Lamp Black Light Red Light Raw Sienna Megilp Mummy Mauve Magenta Nap. Yellow, 00 - E.P. Nap. Yellow, 0, - P. Nap. Vellow, No. 1-L Nap. Yellow, No. 2-M Nap. Yellow, No. 3 - D Neutral Tint New Blue Olive Lake Olive Tint Orpiment Oxford Ochre Paris Blue Paris Green

Each, .06

Payne's Gray Permanent Blue Permanent White Perm, Green, Light Perm. Green, Medium Perm. Green, Deep Persian Red Prussian Blue Prussian Brown Prussian Green Purple Lake Raw Sienna Raw Umber Red Brown Roman Ochre Rome's Yellow Scarlet Lake Silver White Sugar of Lead Trans. Gold Ochre Terra Rosa Terra Verte Vandyke Brown Venetian Red Verdigris Verona Brown Veronese Green Yellow Lake Yellow Ochre Zinc White Zinnober Green, L Zinnober Green, M Zinnober Green, Deep

F. W. Devoe & Co.'s Prepared Oil Colors - continued

SINGLE TUBES

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-		-		-	_

Alizarin Crimson Blue Verditer Brown Madder Burnt Lake Carnation Lake

Per Doz., \$1.60

Citron Yellow Chinese Green Chinese Vermilion English Vermilion French Vermilion

Each, .15

Gaude Lake Green Lake Imperial Orange Perfect Yellow Sepia

CLASS C

Cobalt Green Emerande Green Extract of Gamboge Madder Lake

Per Doz., \$2,70

Madder Lake, Deep Malachite Green Oxide of Chromium Pink Madder

Each, .20

Rose Madder Strontian Yellow Trans. Oxide Chrom.

CLASS D

Cobalt Blue
Cadmium, Lemon
Cadmium, Pale
Cadmium, Light
Cadmium, Yellow
Cadmium, Deep
Cadmium, Orange
Cerulcan Blue

Per Doz., \$3.15

Cadmium, Red Extract of Vermilion Lemon Yellow Mars Brown Mars Red Mars Violet Mars Yellow

Each, .25

Orange Vermilion
Paul Veronese Green
Robert Lake
Rubens' Madder
Scarlet Vermilion
Ultramarine

CLASS E

Antimony Yellow Capucine Madder

Per Doz., \$4.30

French Carmine Indian Yellow

Each, .35

Purple Madder Violet Carmine

CLASS F

Burnt Carmine Madder Carmine

Per Doz., \$5.00

Mars Orange Scarlet Madder

Each, .40

Ultramarine Ash Yellow Madder

CLASS G

Robert Lake, No. 1 Robert Lake, No. 2 Robert Lake, No. 3

Per Doz., \$5.40

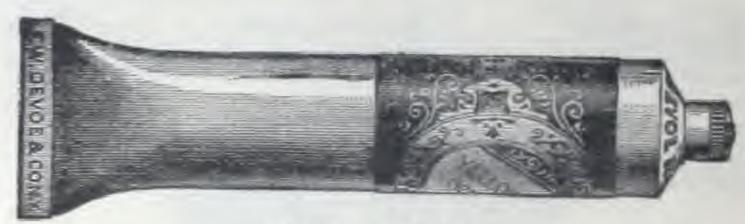
Robert Lake, No. 4 Robert Lake, No. 5 Robert Lake, No. 6

Each, .45

Robert Lake, No. 7 Robert Lake, No. 8

F. W. Devoe & Co.'s Prepared Oil Colors - continued

IN DOUBLE (or Large Size) TUBES



% inch by 4 inches



inch by 4 inches

CLASS A

American Vermilion Antwerp Blue Asphaltum Bistre Bitumen Black Lead Blanc de Laque Blue Black Bone Brown Brilliant Yellow Brown Ochre Brown Pink Burnt Roman Ochre Burnt Sienna Burnt Terre Verte Burnt Umber Caledonian Brown Cappah Brown Cassel Earth China White Chinese Blue Chrome Green, 0-EP Chrome Green, 1-1, Chrome Green, 2-M Chrome Green, 3-D

Per Doz., \$1.50

Chrome Orange Chrome Red Chrome Vellow, 1-L Chrome Yellow, 2-M Chrome Yellow, 3-D Cologne Earth Copal Megilp Cork Black Cremnitz White Crimson Lake Emerald Green Flake White Flesh Ochre French Green Gamboge Geranium Lake Gold Ochre Indian Lake Iudian Red Indigo Italian Pink Ivory Black King's Vellow Lamp Black Light Red

Each, .10

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Light Raw Sienna Magenta Mauve Megilp Mummy Naples Vellow, 00 - EP Naples Yellow, 0-P Naples Yellow, 1-L Naples Vellow 2-M Naples Vellow, 3-D Naples Vellow, French Naples Yellow, Greenish Neutral Tint New Blue Nopal Maroon Nopal Orange Nopal Red Olive Lake Olive Tint Orpiment Oxford Yellow Paris Blue Paris Green Payne's Grav Permanent Blue

F. W. Devoe & Co.'s Prepared Oil Colors - continued

IN DOUBLE (or Large Size) TUBES

CLASS A

Permanent Green, L Permanent Green, M Permanent Green, D Permanent White Permanent Yellow Persian Red Prussian Blue Prussian Brown Prussian Green Purple Lake Raw Sienna

CLASS B

Raw Umber

Alizarin Carmine Alizarin Crimson Alizarin Green Alizarin Orange Alizarin Yellow Brown Madder

CLASS C

Carmine, No. 2
Cobalt Blue
Cobalt Green
Emeraude Green
Extract of Gamboge
Extract of Vermilion
Indian Yellow
Lemon Yellow
Lemon Yellow
Lemon Yellow, P
Madder Lake

CLASS D

Cadmium, Deep Cadmium, Lemon Cadmium, Light

CLASS E

Antimony Yellow Burnt Carmine Capucine Madder Cobalt Yellow, D Cobalt Yellow, Greenish

Per Doz., \$1.50

Red Brown
Roman Ochre
Rome's Yellow
Sap Green
Scarlet Lake
Silver White
Sugar of Lead
Terra Rosa
Terre Verte
Transparent Black
Transparent Black
Vandyke Brown

Per Doz., \$2.70

Carnation Lake Citron Yellow Chinese Vermilion English Vermilion French Vermilion Green Lake

Per Doz., \$4.50

Madder Lake, D
Malachite Green
Mars Brown
Mars Orange
Mars Red
Mars Violet
Mars Violet
Mars Yellow
Oxide of Chromium
Oride of Chromium, Trans.
Orange Vermilion

Per Doz., \$5.25

Cadmium, Orange Cadmium, Pale Cerulean Blue

Per Doz., \$7.20

Cobalt Yellow, Light Crimson Madder French Carmine Madder Carmine Orient Yellow

Each, .10

Venetian Red
Verdigris
Verona Brown
Veronese Green
Yellow Lake
Yellow Ochre
Zinc Yellow
Zinc White
Zinnober Green, L
Zinnober Green, M
Zinnober Green, D

Each, .25

Harrison Red Imperial Orange Perfect Yellow Rose Carthame Rubens' Madder Sepia

Each, .40

Paul Veronese Green
Pink Madder
Purple Madder
Rose Madder
Robert Lake
Scarlet Madder
Scarlet Vermilion
Strontian Yellow
Ultramarine
Viridian

Each, .45

Cadmium, Red Cadmium, Yellow

Each, .60

Ultramarine Ash Violet Carmine Yellow Carmine Yellow Madder

CREMNITZ, FLAKE, SILVER AND ZINC WHITE

CAMBRIDGE STUDIO OIL COLORS



Frost & Adams Co., New England Agents

CLASS A

Blue Black Burnt Sienna Burnt Umber Flake White Golden Ochre Indian Red Ivory Black

CLASS B

Cyprus Umber

CLASS C

Brown Madder Cerulean Blue

CLASS D

Cadmium, Extra Pale | Cobalt Green, Light Cadmium, Pale Cadmium, Mid. Cadmium, Deep Cadmium, Orange Cobalt Blue Cohalt Green, Dark

Naples Yellow, Imitation Prussian Blue Raw Sienna, Dark Raw Sienna, Ligh Raw Umber Roman Ochre Terre Verte

Old Terre Verte

Chinese Vermilion, Permanent Crimson

Cobalt Violet Cobalt Vellow Cyanine Blue French Ultramarine Lemon Yellow Oxide of Chromium, Viridian Oxide of Chromium, Opaque

QUADRUPLE TUBES

Now Plake White. No. 1, Stiff | New Flake White. No. 2, Med. | New Flake White, No 3, Thin

Each, .25

Trans, Golden Ochre Venetian Red Venetian Red, No. 1, light Venetian Red, No. 2 Virgin Gold Ochre Vellow Ochre, Light Yellow Ochre, Oxford

Each, .45 Permanent Blue

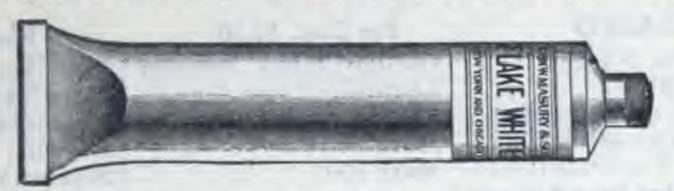
Each, .80

Transparent Brown, Dk. Transparent Brown, Lt.

Each, \$1.25 Purple Madder Rose Madder Ruby Madder Scarlet Madder Scarlet Vermilion Violet Mineral, No. 1 Violet Mineral, No. 2

Each, .32

LE MESURIER ARTISTS' COLORS IN DOUBLE TUBES



CLASS A

Antwerp Blue Asphaltum Bitumen Black Lead Blanc d'Argent Blue Black Bone Brown Brown Ochre Brown Pink Burnt Roman Ochre Burnt Sienna Burnt Umber Caled on ian Brown Cappagh Brown Carmine Lake Chinese Blue Chrome Green, L Chrome Green, M. Chrome Green, D Chrome Yellow, Med. Chrome Yellow, Deep Chrome Yellow, Orange Chrome Red Cologne Earth Cool Roman Ochre Copal Megilp Cork Black Cremintz White Crimson Lake

CLASS B

Brown Madder Burnt Lake Cerulean Blue Chinese Vermilion

CLASS C

Cobalt Green Madder Lake Malchite Green Mineral Gray

Per Doz., \$1.05

Emerald Green Flake White Gamboge Indian Lake Indian Red Indigo Italian Pink Ivory Black Jaune Brilliant Kings' Vellow Lamp Black Light Red Magenta Mauve Megilp Mummy Munich Lake Naples Yellow, L Naples Yellow, D Neutral Tint New Blue Nottingham White Olive Lake Orpiment Oxford Ochre Payne's Gray Perfect Blue Perfect Purple Permanent Blue

Per Doz., \$1.80

Citron Yellow English Vermilion, Pale English Vermilion, Deep

Per Doz., \$3.00

Orange Vermilion Oxide of Chromium Ox. Chromium, Trans.

Each, .10

Permanent White Permanent Yellow Portland Amber Prussian Blue Prussian Brown Prussian Green Purple Lake Pyne's Megilp Raw Sienna Raw Umber Roman Ochre Sap Green Scarlet Lake Silver White Sugar of Lead Terra Rosa Terre Verte Trans. Golden Ochre Vandyke Brown Venetian Red Verdigris Verona Brown Yellow Lake Vellow Ochre Zinc White Zinnober Green, L Zinnober Green, M Zinnober Green, D

Each, .15

Geranium Lake Perfect Yellow Sepia

Each, .25

Pink Madder Rose Madder Strontian Yellow

Le Mesurier Artists' Colors in Tubes - continued

CLASS D

Carmine, No. 2 Cobalt Blue Extract of Vermilion Fr. Ultramarine Blue French Veronese Green Gen. Ultra Blue M. strength Per Doz., \$3.50

Indian Yellow, Imita'n Lemon Yellow Lemon Yellow, P Mars Brown Mars Red

Each, .35

Mars Violet Mars Vellow Rembrandt's Madder Rubens' Madder Scarlet Vermilion

CLASS E

Brill, Ultramarine Blue Extra Malachite Green Field's Orange Vermil. Per Doz., \$4.80

French Carmine Indian Vellow, Gennine Purple Madder

Each, .45

Violet Carmine Viridian

CLASS F

Aureolin Burnt Carmine Cadmium Yellow, Pale Per Doz., \$5.40

Cadmium Yellow, Med. Cadmium Yellow, Orange

Each, .50

Madder Carmine Mars Orange

CLASS G

Per Doz., \$7.20 Gen. Ultra. Blue full strength Robert Lake

Each, .65

Ultramarine Ash

31

Bi Cs

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CLASS H

Extra Marine Carmine

Per Doz., \$9.00

Each, .80

Extra Purple Madder

MUSSINI FINELY PREPARED OIL COLORS

CLASS A

Anwerp Blue Asphaltum Bone Brown Brilliant Vellow Brown Ochre Brown Ochre, Burnt Brown Red Burnt Light Ochre Burnt Sienna Burnt Umber Caput Mortuum, L. Caput Mortuum, D Chrome Vellow, L Chrome Yellow, D med. Chrome Vellow, Orange Chrome Green, L

Per Doz., \$1.50

Crimson Lake Emerald (deck) Green English (light) Red Flesh Ochre Florentine Lake Gold Ochre Indian Red, Light Ivory Black Lemon Vellow Naples Red Naples Yellow, Light Naples Yellow, Deep Naples Yellow, Reddish Permanent Blue Permanent Green, D Prussian Blue

Each, .10

Purple Lake Raw Sienna Raw Umber Roman Ochre Roman Ochre, Burnt Saturn Red Terra Puzzuoli (rose earth) Terre Verte Terre Verte, Burnt Vandyke Brown Verona Green Earth Yellow Ochre, L Yellow Ochre, D. Zinnober Green, L Zinnober Green, D Zinnober Green, Yellowith

Mussini Finely Prepared Oil Colors - continued



CLASS B

Brown Madder Cerulean Blue

Per Doz., \$2.40

Chinese Vermilion Perm. (Ultram.) Yellow Each, .15

Scarlet Lake Scarlet Vermilion

CLASS C

Blue Lake Cobalt Blue, L Cobalt Blue, D Cobalt Green, L Cobalt Green, D Dutch Pink

Per Doz., \$3.50

Green Lake, L Green Lake, D Madder Lake, rose doree Oxide of Chromium Oxide of Chromium, Trans. Pink Madder

Each, .20

Red Ultramarine Sap Green Ultramarine Blue, L Ultramarine Blue, D Violet Ultramarine

CLASS D

Madder Lake, Rose

Per Doz., \$4.00

Madder Lake, Medium | Madder Lake, Violet

Each, .25

CLASS E

Burnt Carmine Cadmium Yellow, L Cadmium, Vellow, D Capucine Madder

Per Doz., \$5.50

Carmine Indian Vellow Madder Lake, Deep Each, .30

Malachite Green Olive Green Vert Emeraude

CLASS F

Per Doz., \$8.00

Each, .45

Blue Green Oxide | Madder Lake Purple, ett. | Extra Madder Carmine

CREMNITZ, FLAKE, SILVER AND ZINC WHITE

per doz., \$3.00 per tube, .20 Double tubes 6.00 Quadruple tubes

The Ingredients of the Binding Materials for the Mussini Oil Colors are:

Poppy Oil and Linseed Oil, varied according to the color, Turpentine Oil, the finest rectified, Balsam Oil, instead of Venetian Turpentine, Amber Varnish

DR. FR. SCHOENFELD & CO'S

CELEBRATED GERMAN OIL COLORS

CLASS A

Antwerp Blue Asphaltum Bitumen Blue Black Bone Black Bone Brown Brown Ochre Brown Pink Brown Red Burnt Brown Ochre Burnt Dark Ochre Burnt Gold Ochre Burnt Roman Ochre Burnt Vellow Ochre Burnt Sienna Burnt Sienna, No. 2 Deep Burnt Terre Verte Burnt Umber Brilliant Vellow, Deep Brilliant Yellow, L. Caledonian Brown Cappah Brown Caput Mortum, Deep Caput Mortum, L. Cassel Earth Chrome Green, No. 1 Chrome Green, No. 2 Chrome Yellow, Deep Chrome Yellow, L Chrome Vellow, M Chrome Vellow, Orange

CLASS B

Cobalt Green, Light Cobalt Green, Deep

CLASS C

Bleu de Lumière Brussels Brown Cobalt Blue, No. 2.

Per Doz., \$1.50

Cologne Earth Cork Black Cremnitz White Crimson Lake Dark English Red Dark Ochre Flesh Ochre Gold Ochre Half Burnt L Ochre Indian Red, D Indian Red, L Indigo Ivory Black Lamp Black Light Red Light English Red Massicot (Vellow) Maugau Brown Mineral Blue Mineral Green Mineral Vellow Morellen Salt (Red) Mummy Munich Lake Naples Red Naples Vellow, Deep Naples Yellow, L.

Per Doz., \$2.00

Naples Vellow, Greenish

Naples Vellow, Reddish

New Blue

Rue Ochre

Kings Yellow No. 4 Ultramarine Blue, light

Per Doz., \$2.50

Japan Yellow Madder Lake, No. 1 Strontian Vellow

Each, .10

Permanent Blue Permanent Green, Deep Permanent Green, L. Permanent Green, M Persian Red Prussian Blue Prussian Brown Raw Sienna Raw Umber Red Oxide of Iron Roman Brown Roman Ochre Satinober Scarlet Lake Schuttgelb Silver White Terre Verte Terre Verte, Veronese Turkey Red Vandyke Brown Velvet Black Venetian Red Verdigris Zinnober, Dunkel Zinnober, Gelb Zinnober, Hellgruner Yellow Ochre, No. 1 Yellow Ochre, No. 2 Yellow of Gold Zinc Yellow

Each, .20

Ultramarine Blue, deep

Zinc White

Each, .25

Ultramarine Yellow Vienna Red

Dr. Fr. Schoenfeld & Co.'s Celebrated German Oil Colors -

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Bleu Celeste Carmine Vermilion Chinese Vermilion Cobalt Blue, No. 1. Green Lake, Light

Per Doz., \$3.20

Green Lake, Deep Madder Lake No. 2 Patent Vermilion Sap Green Sepia

Each, .30

Stil de grain, brun Stil de grain, verte Yellow Lake, Light Yellow Lake, Deep

CLASS E

Cobalt Blue, No. 0 Crimson Lake, genuse Geranium Lake Madder Brown Madder Lake, No. 3

Per Doz., \$4.50

Madder Lake, No. 4 Mars Orange Mars Violet Mars Yellow Robert Lake, No. 7

Each, .40

Robert Lake, No. 8 Rose Carthame Scarlet Vermilion Vandyke Red Violet Lake

CLASS F

Cadmium, No. 1 citron Cadmium, No. 2 light Cadmium, No. 3 medium

Per Doz., \$5.20

Cadmium, No. 4 deep Cadmium, No. 5 orange

Each, .45

Olive Green Verte Emeraude

CLASS G

Aureolin Carmine

Per Doz., \$5.50

Indian Yellow Madder Lake, Burnt

Each, .50

Turquoise Blue

CLASS H

Burnt Carmine Madder Lake, No. 7 Per Doz., \$.640

Oride of Chromium, Blue Green

Malachite Green

Each, .55

Oxide of Chromium, Green Blue Violet Carmine

CLASS I

Per Doz., \$7.50 Madder Lake, No. 8

Each, \$.65

CLASS J

Per Doz., \$9.00 Madder Carmine Each, .75

WHITES. DOUBLE AND QUARDRUPLE TUBES

		-	Do	uble Tube	35			ruple Tut	
Cremnitz White	2	per doz.,	\$3.00	each,	,25	per doz.,	\$6.50	each,	.50
Flake White		11	3.00		.25		6.50	44	.50
		44	3 00		.25	10	6.50	1.5	.50
Silver White	90					211	6.50	44	.50
Zinc White	4	3.0	3.00		.25		0.00		100

FROST & ADAMS CO'S FLAKE WHITE

PREPARED OIL COLOR IN TUBES

Flake White, single tube		*		per doz.,	.90	each,	.06
Flake White, double tube	a			11	1.20	16	.10
Flake White, quadruple tube	2	-	- 61	u	3.60	-66	.30

BREIDBACH'S OIL COLOR SPECIALTIES FOR ARTISTS

IN TUBES

D-1111 / D				314 1	UDES					
Brilliant Rose, Ro	se]	int					per doz.,	\$1.75	each	15
Carmilion .	9.	3				4.	11	1.75	6.6	.15
Carmine Paste		3	-	-	4		0	2.75	110	.25
Crimson Carmine			*	-				1.25	11	.15
French Carmine, 1	No.	40	-			4	EE.	2.75		.25
Green Lake		*			4		11	1.25	4.6	.15
Jaqueminot Rose	*		4				91	1.75	1.0	.15
Madder Brown	*		4	4			**	.85	16	-10
Purple Carmine	*				-	14	41	1.25	-11	.15
Rose Carthame					4		9.9	1.75	11	.15
Scarlet Carmine	9	2		*			41	1.25	in	.15
Yellow Lake		-				*	ex	1.25	10	.15

ROBERSON'S MEDIUM

IN TUBES

Medium, small tube, single .			perdos enos s	
Medium, large tube, double .			per doz., \$3.00 each, .25	
Be tabe, double ,		*	.50	

ARTISTS' STEEL PALETTE KNIVES



31/2	nch Blade,	Cocoa	Handles, German Shape	doz.,	\$4.25	each	.40
4	44	46		11	4.75		.45
			-37	11	5.50	**	.50

THE "RAFFAELLI" SOLID OIL COLORS



100 TINTS, 15 CENTS EACH

Gre	oup 1 -	Red	ls				Group 2-	-Yell	ows			
Rose Madder			1	2	5	6	Orange			43		
Vermilion			7	9			Deep Cadmium Pale Cadmium	*		46		
Bright Flesh	Tints	{	13 19	16	17		Lemon Cadmium		48			
Indian Red				21	22	23	Lemon Yellow Raw Sienna	1	57	53	56	
Light Red			24	27			Buff Tint	*	64			
Burnt Sienna		3	28	29	32		Yellow Ochre		70	72	74	75
Dark Flesh T	ints		37 38	40			Jaune Brilliant Citrine Tints		777	79 82		

Oloup o Olecus	Group	3	-	Green	15
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Viridian	85	86 8	87 89	91	
Emerald Green					
Mid. Chrome	97				
Various Green					
and Apple					
Green Tints	99	102	103	104	105
Terre Verte					
Ox. Chromium					
Mid. Cinnabar	116	118			
Olive Green	191				

Group 4 - Blues

Prussian and Antwerp Blues French Blue and	124	126	127	128
Ultramarine Ash	129	131	134	
Cobalt Blue	136	137	139	
Payne's Gray	141			
Indigo	144	147	149	150
Neutral Tints	151	152	157	
Purple Madder	161			
Permanent Violet	164	166	169	
Indian Purple	170			

Group 5-Browns and Warm Monochrome Tints

Caledonian Brown	171 172 175	Raw Umber	183 187 188
Burnt Umber	177 179	Bitumen	189
Brown Pink	181	The second secon	

Group 6-Black, Grays and White

			~ ~ ~ ~			
Tamp Disals graduated to White			101	194	107	200
Lamp Black, graduated to White			101	104	101	200

The names appended to the tints, which range from dark to light, the first number representing the strongest and the last the weakest tint of any given series, are merely intended as guides to the general hue of each stick, as the nearest representative among ordinary Oil Colors, and must not be taken as necessarily indicative of the nature of the pigment employed

Book of Instruction and Sample Cards on application

PALETTE KNIVES FOR CHINA PAINTERS HORN PALETTE KNIFE



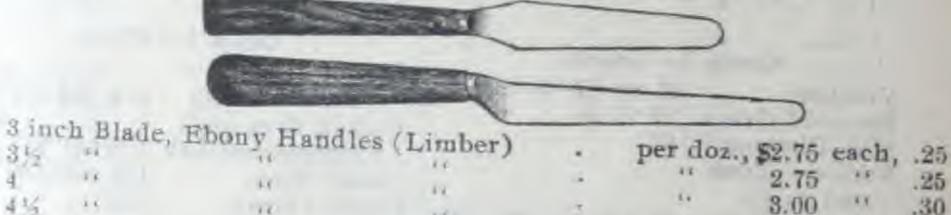
						_				
4 inch Horn	111	\$1.00 each 1.10 "	15	6 inc	h H	orn	doz.,	\$1.75	each,	.20
No. 0. Hor	n Petite	(for gold)	4			*	9.0	.90	18	.25

"PETITE" PALETTE KNIFE



24 inch Blade, Ebony Handle, finest quality tempered steel . . . doz., \$2.75 each, .25

ARTIST'S STEEL PALETTE KNIVES



2.75 .25 .30 .35 3.75 .40 Trowel shape, Ebony Handles . 5.00 45 4.00 .40 4.00 .40 4.50 .45 5.50 .50

19

FRENCH STEEL PALETTE KNIVES

Very Flexible, and Suitable for Applying Color

3, 3½, 4, 4½, 5 inch L 2, 2, 2½, 3 inch S 3, 3½, 4, 4½, 5 inch A 4, 4, 4½, 5 inch L	ong Pointed Trowel hort Broad Trowel ngular Points ong, Slender, Tapered Points ngular Tapered Points	each,	.70 -90 -70 -70
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EXTRA GILDERS' KNIFE

		_		ARR		(Constitution)		
6 inch Blade, C	ocoa Handle		al.					
			-		-			each, .50

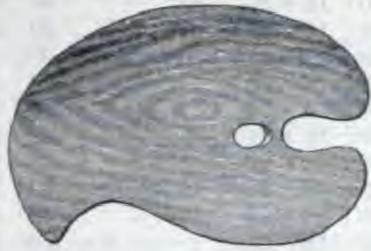
FROST & ADAMS CO'S

MAHOGANY FOLDING PALETTES

Size				Oile	Mahoga	any		Polisi	hed Mah	ngany
8×11	inch	open	doz.,	\$5.50	each,	.55	doz.,	\$12.00	each,	\$1.20
9×13	6.6	4.6	101	6.00	11	.60	1 10	13:00	4.7	1.30
10×13	8.6	4.6	- 61	7.00	44	.70	1000	14.00	6.6	1.40
10×14	**	4.6	166	7.50	8.6	.75	66	14.50	44	1.45
11×13	66	16	66	7.50	16	.80	111,66	14.50	44	1.50

MAHOGANY STUDIO ARM PALETTES

THIS PALETTE IS
PROPERLY BALANCED
FOR THE ARM



THE BACK IS
CROSS-VENEERED
AT THUMB HOLE

131/2	×18	Oiled	finish	each,	\$1.75	131/2	×18	Polished	finish	each.	\$2 25
16	$\times 24$	(1	11	14		16			11	1.6	3 00
19	$\times 27$	11	44	44	2.75	19	×27	41	KP.	1.0	3.80
211/2	×30	14	14	11	3.30	211/2	×30	6.6	11	4.1	4.25
25	×36	£4.	56	110	3.75	25	$\times 36$	11	1.0	16	5.50

SUPERIOR WOODEN PALETTES FOR OIL PAINTING





Length



FOLDING

Polished Mahogany

Oiled Mahogany



OBLONG

Oiled Polished Walnut

.30 .60

.35 .70

.38 .80

.40 .90

.40 1.00

9	inch,	doz.,	\$1.80	each,	.20	doz.,	\$4.20	each,	.60	.30	.60
10	11	316	2.00	66	.20	4.6	4.50	1.4	.70	.35	.70
11	44	1.1	2.40	11	.25	43	5.00	13	.80	.38	.80
12	44	110	2.75	36	.25	44	5.50	-66	.90	.40	.90
13		- 11	3.00	9.4	.30	X+0	6.20	64	1.00	.40	1.00
14	44	46.	3.75	- 11	.35	6.6	7.00		1.10	.45	1.10
15	16	14	4.50	44	.40	11	7.75		1.20	.50	1.20
18	. 44	16.	7.00	- 46	.60	**	12.00	16	1.40	1.00	1.40

THE PFLEGER PATENT STRETCHERS

Dealers attention is called to their great superiority over all others as the pieces are interchangeable, which insures perfect joints at the corners. A great saving in time and labor in making up odd size stretchers

6 × 8 inches, each, 20	** 65			100	14 V 17	inches	earli.	.25	22×32	inches	each	.40
6×10		iches,	each,				11	.25		3.1	1.6	
6×12		66	44				3.6			10	16	.40
7× 9				1000			44			49	45	-40
7x 10				4.37/51			2.1			11	K.F	.40
7×12				7777			54.		24×34	-11	44	.40
7×13							10			1,6	- 00	.40
8×10							6.4		26 × 36	34	4.0	.45
8×11				2220			4.6		24×36	9.6	4.6	.45
8×12			40				++		27×34	11	4.8	.45
8×14							3.00		18 × 44	164	- 41	-45
9×11							188		18 × 46	33	311	.50
9×12 " "20 18×22 " "30 26×40 " "50 9×13 " "25 12×30 " "30 27×36 " "50 10×12 " "25 16×26 " 30 28×36 " 50 10×12 " "25 18×24 " 30 29×36 " 50 10×13 " "25 18×26 " 30 30×36 " 50 10×14 " 25 20×24 " 30 18×48 " 55 12×14 " 25 16×28 " 30 18×48 " 55 10×15 " 25 20×26 " 35 20×60 " 60 10×16 " 25 16×28 " 30 18×40 " 60 10×16 " 25 16×30 " 35 30×40 " 60 10×18 " 25 18×28 " 35 28×40 " 60 11×15 " 25 18×30 " 35 20×44 " 60 12×16 " 25 18×30 " 35 20×44 " 60 12×16 " 25 18×30 " 35 28×42 " 60 12×16 " 25 18×30 " 35 28×42 " 60 12×16 " 25 18×30 " 35 28×44 " 60 12×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 32×40 " 60 13×16 " 25 20×30 " 35 32×40 " 60 13×16 " 25 20×30 " 35 32×40 " 60 13×16 " 25 20×30 " 35 32×40 " 60 13×16 " 25 20×30 " 35 32×40 " 60 12×17 " 25 20×30 " 35 32×40 " 60 13×16 " 25 20×30 " 35 32×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 25 20×30 " 35 30×40 " 60 13×16 " 30×40 " 35 30×40 " 75 12×17 " 35 30×40 " 35 30×40 " 75 12×18 " 35 30×40 " 35 30×40 " 75 12×17 " 30×40 " 30×40 " 75 14×16 " 30×40 " 30×40 " 75 14×16 " 30×40 " 30×40 " 30×40 " 75 14×16 " 30×40 " 30×40 " 30×40 " 75 14×16 " 30×40 " 30×40 " 30×40 " 75 14×16 " 30×40 " 30×40 " 30×40 " 75 14×16 " 30×40 " 30×4						7.5	-6.6				99	.50
9×13				777518			-10	.30	26 × 40	14		
9×14		11	71	100000			11.		27 × 36	110		
10×12 " " .25 18×24 " " .30 29×36 " " .50 10×13 " " .25 18×26 " " .30 30×36 " " .50 10×14 " " .25 20×24 " " .30 18×48 " .55 12×14 " " .25 16×28 " .30 18×50 " .55 10×15 " .25 20×26 " .35 20×60 " .60 10×16 " .25 16×30 " .35 20×60 " .60 10×16 " .25 16×30 " .35 30×40 " .60 10×18 " .25 18×28 " .35 28×40 " .60 11×15 " .25 20×28 " .35 28×42 " .60 11×15 " .25 18×32 " .35 28×42 " .60 11×15 " .25 18×32 " .35 26×44 " .60 11×16 " .25 18×32 " .35 26×44 " .60 11×16 " .25 18×32 " .35 26×44 " .60 11×16 " .25 20×30 " .35 26×44 " .60 11×16 " .25 20×30 " .35 26×46 " .75 10×20 " .25 20×32 " .36 28×44 " .75 11×17 " .25 20×32 " .36 28×44 " .75 11×18 " .25 20×32 " .40 28×46 " .75 11×18 " .25 20×32 " .40 28×46 " .75 11×20 " .25 16×36 " .40 30×46 " .75 11×22 " .25 18×36 " .30 11×22 " .30		11					- 17		28×36	11		.50
10 × 13			-24				11		29 × 36	44.		
10×14							18.6		30 × 36	46	1.5	.50
12×14		16	44				21		18 × 48	3.6		.55
10×15		10	11.				44.		18 × 50	16	2.0	.55
10×16		14	113				2.6		20 × 80	14	44	.60
10×18 " " .25 18×28 " " .35 28×40 " " .60 11×15 " " .25 20×28 " " .35 28×42 " " .60 12×15 " " .25 18×30 " " .35 26×44 " " .60 12×16 " " .25 18×32 " " .35 32×40 " " .60 13×16 " " .25 20×30 " " .35 32×40 " " .60 13×16 " " .25 20×30 " " .35 26×44 " " .75 10×20 " " .25 22×27 " " .35 28×44 " .75 12×17 " .25 20×32 " " .40 28×46 " .75 12×18 " .25 22×30 " .40 28×46 " .75 12×20 " .25 16×36 " .40 30×46 " .75 12×22 " .25 18×36 " .40 30×46 " .75 14×16 " .25 20×36 " " .40 30×48 " .75 14×16 " .25 20×36 " " .40 30×50 " .76 WIDE SERIES—3 inches 16×42 inches, each, .68 28×48 inches, each, 1.00 36×42 inches, each, 1.00 16×50 " " .74 30×40 " .80 36×50 " " .76 1.34 18×44 " .74 30×44 " .80 36×50 " " .134 18×48 " .74 30×44 " .80 36×50 " " .134 18×48 " .74 32×40 " .80 36×50 " " .134 18×48 " .74 32×40 " .80 40×54 " .134 18×48 " .74 32×40 " .80 40×54 " .134 18×48 " .74 32×40 " .80 40×54 " .134 18×48 " .74 32×40 " .80 40×54 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .74 34×42 " .100 40×60 " .134 18×50 " .134 18×50 " .74 34×42 " .100 40×60 " .134 134 134 134 134 134 134 134		1.5	11				4.1	.35	30 × 40	3.6		.60
11×15 " " .25		1.6	11-				4.6	.35	28×40			
12×15 " " .25		10	44				-00	.35	28 × 42			
12×16		1.1	-17		18 × 36	16	60.	.35	20 × 44			
13×16		11	41		18 × 35	11.	13	.35	32 × 40			
10×20		41	300	.25	20×30	111	44	.35	26×40	N .		
12×18	10×20	1.2	3.6	.25	22×27	10	311	.35	28 × 44			
12×18 " ".25 22×30 " ".40 28×50 " ".75 12×20 " ".25 16×36 " ".40 30×46 " ".75 12×22 " ".25 18×36 " ".40 30×48 " ".75 14×16 " ".25 20×36 " ".40 30×50 " ".76 WIDE SERIES—3 inches 16×42 inches, each, .68 28×48 inches, each, 1.00 36×42 inches, each, 1.00 16×50 " ".74 30×40 " ".80 36×50 " ".100 16×60 " ".80 30×42 " ".80 36×60 " ".134 18×44 " ".74 30×44 " ".80 40×50 " ".134 18×48 " ".74 32×40 " ".80 40×50 " ".134 18×48 " ".74 32×40 " ".80 40×54 " ".134 18×50 " ".74 34×42 " ".100 40×60 " ".134 20×50 " ".80 34×44 " ".100 40×60 " ".134	12×17	33	910	.25	20×32	1.0	N.E.	.40				
12×20	12×18	11	.93	.25	22×30)		.40	28×50			
WIDE SERIES—3 inches 16×42 inches, each, .68 28×48 inches, each, 1.00 36×42 inches, each, 1.00 16×50 ''	12×20	13.	32	.25	16×36				30×40			
WIDE SERIES—3 inches 16×42 inches, each, .68 28×48 inches, each, 1.00 36×42 inches, each, 1.00 16×50 ''	12×22	1.4	9.0	.25	18 × 36	3 14	300	.40	30 × 48	1.6		
16×42 inches, each, .68 28×48 inches, each, 1.00 36×42 inches, each, 1.00 16×50 ''	14×16	8.0	3.5	.25	20×36	5 60	11	-40	30 × 50	**	44	.75
16×42 inches, each, .68 28×48 inches, each, 1.00 36×42 inches, each, 1.00 16×50 ''					WIDE	SERIE	S-3 i	nches				
16×50 " " .74 30×40 " " .80 36×50 " " 1.00 16×60 " " .80 30×42 " " .80 36×60 " " 1.34 18×44 " " .74 30×44 " " .80 40×50 " " 1.34 18×48 " " .74 32×40 " " .80 40×54 " " 1.34 18×50 " " .74 34×42 " " 1.00 40×60 " " 1.34 20×50 " " .80 34×44 " " 1.00 44×64 " " 1.34	16×193	nohee	each	68					36 × 42	inches	each	.1.00
16×60 '' '.80 30×42 '' '.80 36×60 '' '1.34 18×44 '' '.74 30×44 '' '.80 40×50 '' '1.34 18×48 '' '.74 32×40 '' '.80 40×54 '' '' 1.34 18×50 '' '.74 34×42 '' '1.00 40×60 '' '1.34 20×50 '' '.80 34×44 '' '' 1.00 44×64 '' '' 1.34					A TABLE OF THE		15				14	
18×44 " " .74 30×44 " " .80 40×50 " " 1.34 18×48 " " .74 32×40 " " .80 40×54 " " 1.34 18×50 " " .74 34×42 " " 1.00 40×60 " " 1.34 20×50 " " .80 34×44 " " 1.00 44×64 " " 1.34							11				55	
18×48 " " .74 32×40 " " .80 40×54 " " 1.34 18×50 " " .74 34×42 " " 1.00 40×60 " " 1.34 20×50 " " .80 34×44 " " 1.00 44×64 " " 1.34			14				61					
18×50 " " .74 34×42 " " 1.00 40×60 " " 1.34 20×50 " " .80 34×44 " " 1.00 44×64 " " 1.34				100			2.4				84	
20×50 " " .80 34×44 " " 1.00 44×64 " " 1.34												
										4.3	44	
The second secon			41									

Cross Bars, extra, each, .34

PFLEGER PATENT STRETCHERS FOR CANVAS

All lengths from 6 to 36 inches, including wedges per 100 strips, \$ 6.00

For a small stock the most desirable lengths are 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 and 36 in.

THE PFLEGER PATENT STRETCHERS

Narrow and Thin

All leng	ths fre	om 6 inches to 12 inches		per 10	strips,	\$3.75
11	11	13 inches to 18 inches		11	11	4.75
44	11	19 inches to 24 inches		**	44	5.50

OVAL STRETCHERS

The following sizes are regular

12×16	inches			each,	\$1.60	18×22	inches			each,	\$1.85
14×17	42		4	11	1.60	20×24	11	1	4	1.6	2.00
16×20	16			61		22×27	4.0			1.6	2.15
17×21	46			4.5	100 (100 (100 (100 (100 (100 (100 (100	25×30				4.4	2.30

An extra charge made when one or more odd size Oval Stretchers are ordered

Stretchers with arcs, Circular, or any other shape made to order only

A. D. SHATTUCK'S PATENT STRETCHER KEYS

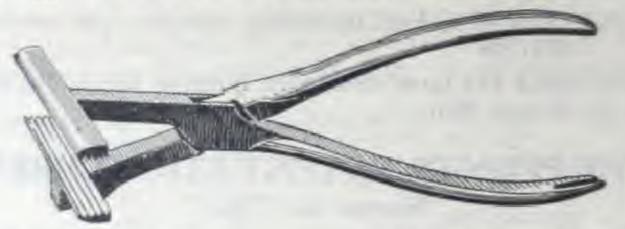
Applied to any mitered corner they make a complete stretcher. Any tength can be cut from the strip — the corners cut on a miter — and the key applied





No. 1, per gross, \$2.85 per doz., .35 | No. 3, per gross, \$5.05 per doz., .60 No. 2, .45 No. 4, ... 6.72

CANVAS PLIERS FOR STRETCHING CANVAS



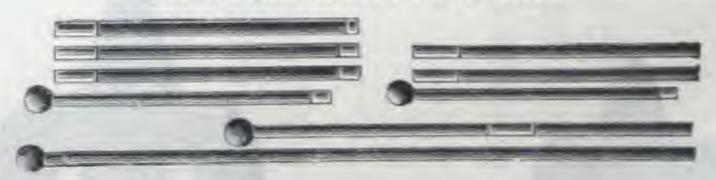


No. 3. Large, Curved Jaw with Spring . . . each, \$2.00

CANVAS PINS



FRENCH MAHL STICKS



PENCIL STICKS AND HAND RESTS

Plain Cedar								each,	.01
Varnished Cedar		4.		- 4		-	-	4.6	.02
Ivory				9.				4.6	.10
Walnut Hand Re	sts for	China	Pai	inting			4	44	.25

FROST & ADAMS CO'S

AMERICAN PREPARED CANVAS FOR OIL PAINTING

On Best English Linen - in Rolls of Six Yards

	Si	ngle Prime	with tooth)	Smooth	Ron	ran	Twill	ed		
27	in. wide	per ro	11, \$5.85	\$5.85	\$5	.85	\$6.	60	per yard,	\$1.10
30	14	14	6.30	6.30	6.	30	7.1	50	- 6	1.20
36	14	11	7.50	7.50	7.	50	8.	70	**	1.30
42	THE DE	11	8.80	8.80	- 8.	80	11.	40	11	1.50
45	16	2.5	10.40	10.40	10.	40	13.5	20	11	1.75
54	1.6	4.6	14.30	14.30	14.	30			16	2.40
62	3.6	-6.6	20.80	20.80					.88	3.50
74	44	4.0	27.30	27.30					**	4.60
80	1.86	11	32.50	32.50					16	5.50
96	3.6	14	39.00	39.00					42	6.70
120	34	316	52.00	52.00	1	4			16	8.70
144	-05	11	70.20	70.20	+		4		- 11	12.00

FROST & ADAMS CO'S "COLUMBIA" CANVAS

Of Smooth, Even Grain, Pliable, of Lighter Texture than Our Best English
Linen -- in Rolls of Six Yards

27 in	ches wide	-		200	1	100	per roll	1, \$5.20	per yard,	.90
30	16	-	0	0.00	1			5.50	14	1.00
36	16	150	175	112.0	1.		**	6.50	14	1.15
42	.00		10.6.01				14	7.80	16	1.40
45				14			44	9.10	11	1.75
54	11	*	-	6			14	11.70	11	2.00

FROST & ADAMS CO'S ABSORBENT CANVAS

Best English Linen - in Rolls of Six Yards

27 in	ches wide						per	roll	\$5.85	per yar	d, \$1.00
30	66	122	7.	121	1.1	1.00	1/12 0	G	9.30	- 41	1.10
36	11		-			-		**	7.50		1 30
42	44	1 4		2	10	-311		166	8.80	44	1.50

FROST & ADAMS CO'S STUDENT'S LINEN CANVAS

"Single Prime" and "Semi-Absorbent"—in Rolls of Six Yards

44 inches wide per roll, \$6.50 per yard, \$1.15

FROST & ADAMS CO'S

NO.	3, TW.	ILLED) SKE	TCHING	CAN	IVAS	
Hea	vv and St	rong. (Gray bac	k. In rolls	of Six Y	ards	
28 inches wide						per yard,	.75
36		- 2		16	5 40	10	1.00
	F	ROST	& ADA	MS CO'S			
NO. 4, GR	AY BA	CK.	PLAIN	SKET	CHINO	CANV	AS
and a second				olls of Six Y			
28 inches wide	Sed Dischart			per rol		per vard.	.60
31 "		4		11	3.55	11	.75
37 "				16	4.25	4.6	1.00
FROST	& ADA	MS C	O'S "	ACADE	MY"	CANVA	S
				x Yards			
40 inches wide				. per rol	1. \$3.25	per vard.	.75
20 220200 11300				- P	.,	Per Jura,	
FROST	& AD	AMS	co's '	'STUDIO)" CA	INVAS	
		In R	olls of Si	x Yards			
40 inches wide				per rol	1, \$3.60	per yard,	.70
FROS	T & A	DAMS	CO'S	COAR	SE CA	NVAS	
36 inches wide	-	Decorati	on, etc.	-In Rolls o			es no
54		-	1 1	perior	9.60	per yard,	1.60
96		4		11	28.80	44	4.80
120				10	38.40	16	6.50
144		- 41		4.0	57.60	**	9.75
		In Ro	alls of T	en Yards			
144 inches wide				per roll, 1	\$96.00	per yard, \$	510.50
216				44	(44,00		15.50
IMP	ORTE	FRI	ENCH	LINEN	CAN	VAS	
				wide, per y			00.00
2. Lippin	cott Med	. Grain	80	wide, per y		00 40 in.	3.50
	int, Fine		80	46 46		00 40 "	3.50
4. White				11 11		00 40 "	
5. Yellow	Fine		80	11 11		00 40 15	
6. Gray	" Twil		GU	10	7:	00 40 18	40.100.00
7. Cream	" Fine	£ 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	80	11 - 12	A	00 40 11	9.00

Sample Book of Canvas furnished to Dealers

FROST & ADAMS CO'S

NO. 1, SMOOTH OR SINGLE PRIME, ENGLISH LINEN

In Rolls of Six Yards

27	inches wide	25				per roll	\$5.85	per yar	d, \$1.00
30	16	*		-		- 11	6.30	4.6	1.10
36	16	14.	16.	10.6	100	11	7.50	11	1.20
42	14					ii.	8.80		1.35
10	feet × 21 feet	4	1	Will		46	47.00		
10	" × 26 "			1 21		26	58.00		
10	" × 30 "		10	-		11	67.00		

FROST & ADAMS CO'S

PASTEL CANVAS. "SUPER" BEST ENGLISH LINEN

In Rolls of Six Yards

Style A — Velvet surface

Style B — Gray, rough surface

Style C — Buff, rough surface

30	inches wide	4	per roll, \$ 8.40	\$7.20	per yard, \$1.50
36	1.6		10.20	9.00	1.75

PASTEL CANVAS. EXTRA. SKETCHING LINEN

In Rolls of Six Yards

Style D — Velvet surface
Style E — Gray, rough surface
Style F — Buff, rough surface

				Velv	ret Surface	Rough Surface		
31 inc	hes wide		-	per roll,	\$6.00	\$5,40	per yard,	\$1.50
37	14	12.11		11	7.80	6.60	46	1.75

WINSOR & NEWTON'S "WINTON" CANVAS

In Rolls of Six Yards

27	in, wide	roll,	\$6.00	yard,	\$1.10	45 i	n. wide	roll	\$11.00	yard	\$1.85
30	14	£3.	7.00	16	1.25	54	4.6	14	12.50	44	2.25
36	111	6.6	8.00	44	1.35	62	111	33	15.00	11	3.00
42	18	11	9.50	11	1.60	74	18.	66	17.00	-(1	3.50

FROST & ADAMS CO'S

No. 5, TWILLED SKETCHING CANVAS

In Rolls of Six Yards

40 inches wide	Buff Tint, F	per roll, \$3.25	per yard,	.60
40 "	Gray " E	3.25		.60

SCHOOL OF ART CANVAS

In Rolls of Six Yards

40 inches wide	4	2	8	1	4	per roll, \$3.40	per yard .60
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FRENCH TAPESTRY CANVAS

No. 3, 3	7 inches wide,	Fine ribbed per yard, \$1	.60
4, 3	7 **	47 11	1.30
10, 8	4 "	THE	3.35
11, 8	2 *;	98.91	3.30
12, 8	2 n	AUDIO DE CONTRA	3.30
13, 8	2 14		1.00
13, B., 5	1 **	The state of the s	3.00
14, 120) "		3.00
15, B., 5	8 60	A I II	.60
15, Ter., 12	2 **		.00
16, 120)		.00
18, 120)		.20
19, 8:	2 11	The state of the s	.85
20, 85	2 "		20
20, Ter., 50	3. 16	" wool, ex. fine st'ch, superfine 8.	
20, Bis., 5(11	11 91 0	.00
21, 120	, ,,	NV CONTRACTOR OF THE PARTY OF T	.00
21, Bis., 56	44	III	.60

The prices quoted on the above tapestries by the yard, means the running yard of whatever width the number designates — not the square yard.

WINSOR & NEWTON'S "BRITISH" CANVAS

Three Surfaces, Rough, Smooth and Roman- In Rolls of Six Yards

27	inches wide,	Smooth,	per roll,	\$5.00	Single	Prime, \$4.50	per va	rd, \$1.00
30		**	***	5.75	11	5.25	4.6	1.10
-36	34	4.0	1.5	6.75	**	6.00	11	1.20
42	- 11	4.6	19.6	7.75	11	7.00		1.35
45	100	66	194	8.50	4.6	8.00		1.75
54	44	* 6	16	11.50	3.6	10.00	4.4	2.25
62	116	8.4	16	14.50	44	13.00	14	3.00
74	146	9.5	14	23.00	- 11	18.00	11	3.75

WINSOR & NEWTON'S BEST ARTIST'S CANVAS

PREPARED FOR PAINTING IN OIL COLORS

Full Primed, Single Primed and White Single Primed

British Linen, carefully selected and of fine quality, is used by Winsor & Newton

27 in	ches wide	14.				per roll,	\$ 6.90	per yard,	\$1.25
30	11					44	7.60	14	1.40
36	44					4.0	8.70	4.4	1.50
42	44	*				64	10.30	1.4	2.00
45	X i			-		14.6	12.60	9.6	2.25
54	44	100			2	44	16.10	118	2.75
62	44		0.			* *	19.30		3.50
74	10					**	24.00	166	4.00
86	it			14		1.5	30.00	44	5.00

Roman Canvas is supplied at the same prices

FROST & ADAMS CO'S

NO. O, EXTRA SMOOTH, ENGLISH LINEN

FINEST GRADE

27 inches wide .			. *		per rol	1, \$7.50	per yard, \$1.35		
30	11			540	11	8.45	16	1.50	
36	46		5.	9	3.6	9.75	16	1.75	

GEORGE ROWNEY & CO'S PREPARED CANVAS

QUALITY B

27 inc	ches wide		40			per roll	, \$4.50	per yare	d, \$1.00	
30	66				-	10	5.25	11	1.10	
36	16			1 40	40	6.6	6.00	11	1.20	
42	46	-		-		4.6	7.00	TOT House	1.35	

FROST & ADAMS CO'S

AMERICAN PREPARED CANVAS ON STRETCHERS

6 ×	8 1	iches					each, g	.32	15×18 i	iches					each.	8 .68
6 ×		33.					46	.32	15×27	++		1	4	1	11	.05
0.8		160					58	.32	16×20	110			-		164-	.76
G oc		41			1		31	.32	16×22	111	-		-		19	-76
6.50		24					34	.45	16 × 24	143	-			·	- 44	,85
700		113					44	.34	16 × 26	99		-			39	.90
7 ×		11					18	.39	16×42	44		-			AS.	2.00
7 ×		100			2		35	.32	16×50	.17			-		35	2,20
7×		110					11.	.32	16 × 60	154					31	2.35
8 ×		.0					- 53	.32	17×91	199			- 7	11	- W	.85
8 ×		100					44	.32	17×25	17				-	13	.95
8 ×		H					56	.45	18 × 22	10	90	1	8	-	All	.95
8.8		-10			0		16	.50	18×24	AL.			0		- 33	.95
8 × 3		15.6					34.	.58	18 × 26	14			i i		44	.95
9×		14					Vi.	.32	18 × 30	40				-	11	1.00
9 ×		170		1			140	.32	18 × 48	140				-0	51	2.35
9 ×		64		2			16	.30	18 × 50	46			3		14	2,35
9.8		(6)					34	.38	18 × 60	40.				-	- 34	2.50
9×		10		т.	-	3.	59	.46	20×24	- 60				T	- 14	1.05
9 ×		165		-			W	.50	20 × 27	198					41	1.08
9 x 3		64					93	.58	20×30	11				-	4.1	1.16
10×		30			1		All	.38	22 x 27	33					49.	1.12
10 ×		99			1	- 5	44	.40	22 × 30	05						1,20
10 x		65				- 1	46		22 × 36	/44					44	1.40
10 x				-	*		VI	-45	24 × 30				^		14	
10×		166	110		4		8	-45	24 × 34	98	331	2		-	140	1.25
10×		-	15	*	- 3			54	24 × 36	1.80			~		9	1,40
10×		61			- 7		10	.63	25 × 30	96		-		ii.	-	1.60
10×		.03					34		26×36	0.		7	-			1.25
11×		4.4	-		-		38.	.72	26 × 42				- 5		41	1.55
12×		150					-11	.50	27 × 34	10	-30	0	-91	15	34.	2,00
12 x		49	19				24	.50	28 × 48	44		3	3		16	1.50
12 ×		3.0		,		3	.45	.54	29 × 36	17		- 3	- 1	1		2.45
12×		10		-	*		14	.04	30 × 40	46	9.1	1		8		1.60
12×		-0			*		-16	.58	30 × 42	44		10.00			- 11	2.45
12 ×		44	-				44	.58	30 × 44	100		-	7-	95	11.	2,45
12 ×		94				1	44	.63	30×50	51				-	000	2.50
12 H		11	4.	-	- 5		-11	.76	34×42	41.			1		44	2.90
		16					н	.90	0.5000000000000000000000000000000000000	NV.	7				- 10	2.50
14%		HA.		-0		4	11	.63	34×44	.0		8				2.65
14×		30	*	4	-	-6	, As	.63	34×60 36×42	63					10	3.60
14×			*	-			99	.68					-		41	2.50
14 8 3		45	8	-	5.	-		.68	36 × 50				1 1	2	44.	3.15
14×3		AL.	*	_	7		40	.68	36 × 60	AV		-		-	AC	3.80
14×3		11			3	-1		.80	40 × 50	31		3		~	**	3.40
14×4		- 11		1	0.	u		1.55	40 × 54				-		35	3.60
14×	00		*			-	-	2.30								

Special and irregular sizes made and stretched to order, of Single Prime, Roman, Twilled, and Brush Prepared American Canvas

WINSOR & NEWTON'S

PREPARED CANVAS ON STRETCHERS

		Smooth	or Roman	Twilled			Smooth	or Roman	Twilled
6 x 8 lo	ches	each, 8	.35	8 .45	15 x 18 h	iches	each, 8		8 .95
Gx 9	116	24	.35	.45	15×27	11		1.05	1.20
6 x 10	46	332	.35	.45	15×30	44	47	1.15	1.40
6 × 12	46	44	.35	.45	16×18	41	43	.80	1,10
6 × 18	46	16	.50	.60	16 × 20	45	AS	.85	1.10
7 × 9	86	141	.35	.45	16 × 22	**	1.5	.85	1.10
7×10	H	16	.35	.45	16 × 24	11	All	.90	1.15
7×11	114	115	.55	.45	16 x -6		44	1.00	1.25
7×12	M -	3.6	.35	.45	16 × 42	6.6	4.6	2.25	2.65
8×10	44	46	.35	.45	16 × 50	10		2.45	2.85
8×12	111	16	.35	,45	16×60	11	44	2.60	3.00
8×16	41	1.6	.50	-60	17 × 21	**	-94	.95	1.15
8×18	44	4.6	.55	.65	17 × 25	4.6	11-	1.05	1.25
8 × 20	44	i i i	.65	.75	18×22	16	- 610	1.05	1.25
9×11	14.	94	.35	.45	18×24	34		1.05	1.25
9×12	33	13.	.35	.45	18×26	5.8	**	1.05	1.35
9 × 13	139	46	.40	.50	18 × 30	**	- 13	1.10	1.40
9×14	10	46	.42	.55	18 × 40	34	41	1.80	2.75
9 × 15	44	46	.50	.60	18 × 48	4.0	45	2.40	2.90
9×17	10	11.0	.55	.75	18 × 50	4.8	.51	2.40	2.90
9×20	43	44	.65	.80	18 × 60	44	-66	2,75	3.15
10 × 12	110	155	.40	.55	20×24	4.0	44	1.15	1.45
10×14	24	Ài.	.45	,60	20×27	4.0	4.5	1.20	1.45
10 × 15	66	- 11	,50	.60	20×30	41	44	1.30	1.60
10×16	44	146	.50	.80	22×27	44	44	1.25	1.65
10×18	32	41	.60	.75	22×30	11	44.	1.35	1.70
10×20	No.	1.5	.70	.85	22×36	144	11	1.55	2.00
10 x 22	+1	4.0	.75	.05	24×30	44	14	1.40	1.85
10×24	44	66	.80	.95	24×34	144	**	1.55	2.00
11 × 15	111	14	-55	.70	24×36	113	- 14	1.80	2.25
12×14	AL.	16	-55	70	25×30	69	5.5	1,40	1.90
12 × 15	44	310	.60	.75	26 × 36	A)E	- 11	1.70	2.30
12×16	64	11	.60	.75	26×42	65	96	2.20	2.75
12 × 17	3.5	44	.65	.80	27 × 34	.65	14	1.00	
12 × 18	16	16	.65	.90	28×48	i.i.	11	2.75	3.60
12 × 20	14.	53.	.70	.90	29 × 36	16	11	1.75	2.50
12 × 24	15:	4.8	.85	1.05	30 × 40		11	2.70	3.15
12 × 30	16	- 11.	1.00	1.25	30 × 42	5.6	-3.5	2.75	3.25
12 × 36	34	ài-	1.25	1.65	30 x 44	46	1.0	2.85	3.50
14 × 16	46	31.	.70	.90	30 × 50	3.6	4.9	3.10	4.00
14×17	-99	14.	.70 .70 .75	.95	34 × 42	35	-44	2.80	3.50
14 × 18	38	146	.75	,95	34 × 44	34	14	2.95	3.65
14 × 10	14	44	.75	1.00	34 × 60	16-	46	4.00	5.00
14 × 20	146	44	.75	1.00	36 × 42	36.	16	2.80	3.05
14 × 22 14 × 24	64	134	.85	1.10	36 × 50	16.	16	3.50	4.25
14 × 40	19	96	1.70	2,30	36 × 60	46.		4.20	5.26
14 × 50	14	44	2.00	2.60	40 × 50	44	- 54	3.80	4.75
14 × 60	16	** 10	2.55	3.40	40 × 54	4.6:	42	3.90	5.00
14 × 00			-	4.24	di				

Note. — French Canvas of the above sizes stretched to order at short notice in the most workmanlike manner. Ordinary French Canvas same price as Winsor & Newton's Smooth. Best Ordinary, and Fine French higher than Winsor & Newton's Smooth. Paintings on Canvas cut down and re-stretched by experienced work men

Special and irregular sizes made and stretched to order of French, German and American Canvas

FROST & ADAMS CO'S

PREPARED CANVAS ON STRETCHERS

Ac demy Sketching Canvas

6 × 8	inches					each,	.25	14×26	inches					anah	ne.
6 × 9	84	+	-	1	-	81	.25	14 x 28	44				-	each,	.65
6×10	44		-		+	44	.25	15 x 18	16		3			146	.75
6 x 12	14	4	7			10	.25	15 8 27	144				*	36	.60
7 x 9	44		*			84	.25	16 x 20	19		ň	*		40	.75
7×10	44	-0		-		44	.25	16 x 22	54.	+	96			366	.55
7×11			3			**	.25	16 × 24	146	*	*		*	-	.55
7×12	44					41	.25	17×21	44	-	-4-	0.		94	.70
8 x 10	100		1			14	.25	17 × 25	44.					44	.63
8 x 12	44				+	NE.	.25	18 × 21	**	*				44	.75
8 × 16			-	- 3		**	.35	18 x 26				4			.75
8 x 18	165	12				240	.38	18 × 30	44		-	-		14	.15
8 × 20	16.0	-	7	3	-	11	.45	18 × 40	av.	*			*	**	.80
9×11	44					ic	.25	18 × 50	46		-		*	14	1.50
9 × 12	44	1				**	.25	20 × 24	90				-	**	1.80
9 × 13	99			-		44	.30	20 x 27	46						.80
9×14	44	7				46	.30	20 x 30	16.0		*			**	.85
9 x 15	44					14	.35	22 x 27	66				-	44	.85
9×17	9.1				- 1	194	.38	22 × 30	68.	4.	-			Ni.	.85
9 x 20	44			- 5	2	39	.45	24 × 30	11			7		- 14	1.00
10 × 12	11		1		4	44	,30	24×34	13						1,00
16 × 14	**				7	34		24×36	160						1.15
10 × 15	11			*	2	10	.30	25 × 30	391	4.5			*	4,	1.25
10×16	34.		-	-		146	.35	26 x 36	14					**	1.00
10 × 18	44		-			15	.35	26 x 42	34				*	44	1.20
10 × 20	10		-	3	-		.40	1327	11			100			1.60
10 × 24	44		4	1		110	.50	27 × 34	11		-			-11	1.15
11 × 15	ia:		15				.55	28 × 48			-			4.6	1.90
12×14	às.	3	1			10	.40	29 × 36	14	1	-	4		14	1.25
12 × 15	44			-			.40	30 × 40	14.	+			*	**	2.00
12 × 16	16			-		40.	4.5	30 × 42	11		*		*	**	1.90
12 × 17	i.						.45	30 x 44		*			1	**	2.00
12 × 18	16.			1	-	**	45	30 × 50						- 25	2.15
12 x 20	15.		-	-	4	34	.45	34×42	40	*			-		2.00
12 × 24	9		7	-	3	ii.	.45	34 × 44				*		46	2.10
14×16	44	4	-				.60	34 × 60	46	*	2	8		16	2.80
14×17	Ta.	-	-	1	0	16	.45	36 × 42	A6.	5	-				2.00
14×18				19		64	.50	36 × 50	H	+	-		9		2,45
14×20	10	Ť	-	14.			-50	36 × 60	-61	r.	-	0	+	14	3.00
14 × 22		1	-	*		**	*50	40 × 50	10.	Y			*	44	2.75
14 x 24		*		*	*		.50	40 < 54			-	*		41	2.80
*****		*		*	4	-10	.60								

FROST & ADAMS CO'S

ARTISTS' OILS, VARNISHES, MEDIUMS, ETC.



1 OZ. BOTTLE



214 OZ. BOTTLE



1 OZ. BOTTLE

Doz.	Each		Doz.	Each
Amber Varnish \$ 2.75		Liquid for Gold Paint	\$1.50	.15
Fixatif, 2 oz., for Charcost 2.40	10.00	Mastic Varuish	4.80	.45
Fixatif, 4 oz., for Charcoal 3.00	1	Nut Oil	1.80	.20
Fixatif, 8 oz., for Charcoal 4.20		Pale Drying Oil .	1 80	.20
Fixatif, 16 oz., for Charcoal 7.80		Picture Mastic Varnish	3.50	.30
Fixatif, 32 oz., for Charcoal 13.80		Picture Copal Varnish	2.40	,25
Fixatif for Crayons 3.00		Picture Varnish, Colorless	2.40	,25
Fixatif for Pastels . 3.00		Poppy Oil	1.80	.20
Siccatif de Harlem, French 5.40		Retouching Varnish	2.75	+25
Grecian Varnish . 2.75		Siccatif de Courtray	2.75	.20
Gum Water 2.40		Spirits Turpentine .	1.25	.15
Japan Gold Size . 2.25		Strong Drying Oil .	1.50	.15
Linseed Oil, Cold Pressed 1.50		White Damar Varnish	2.40	.25
Liquid Dryer 2.40		Country and the state of the st	2.75	.25
Adhesive Preparation, for ph			2.40	.25
Diaphanous Liquid, for mak	ing pho	tos transparent	2.00	.20
Preservative Liquid, for pho	tograph	painting on glass .	2.40	.25
Transparency Medium, for p	hotogra	oh painting on glass .	2.40	.25
Sochnees' French Varnish,	No. 3 fo	r Oil Colors	3.00	+25
Sochnees' French Varnish,	No. 2 for	r Water Colors	3.00	.25
F. W. Co. Mixing Preparation	on, 2 oz		3.00	.25

The F. W. Co. preparation, mixed with the Oil Colors, will prevent their running when used on paper, satin or wood

WINSOR & NEWTON'S OILS AND VARNISHES



2 OUNCE ROUND



I OUNCE FLAT



SIC. DE HARLEM

	1 0z.	2 Oz.			1 Oz.	2 0z.
Amber Varnish . ea.	.30	÷60	Oil Vehicles, 3, 3a, 3b	ea.	.20	.40
Brown Spirit Varnish	.20	.40	Pale Drying Oil .	20	.10	.20
Crystal or Map Varnish "	.20	.30	Pale Amber Varnish	40	.40	175
FatOil "	.15	.25	Picture Copal Varnish	110	.20	.40
Japan Gold Size . "	.15	,25	Picture Mastic Varnish	49.	.30	.60
Manganesed Linseed Oil "	.10	.20	Purified Linseed Oil	48	:10	.15
Manganesed Poppy Oil "	.10	.20	Purified Poppy Oil	84	.10	.20
Mastic Varnish . "	.40	.75	Pur. Walnut (Nut) Oil	11	-10	.15
Oil Copal Varnish	.20	.40	Strong Drying Oil	41	-10	.20
Oil of Spike "	.20	.40	W 4 1 W	46	.10	.15
Oil Vehicles, 1, 1a, 1b "	.20	.40	White Lac Varnish	10	.20	.40
Oil Vehicles, 2, 2a, 2b	.20	. 10	White Spirit Varnish	2.6	.20	:40

T. G. VIBERT'S FRENCH OILS AND VARNISHES

Essence de Petrole dat., \$3.60 ea85	Vernis a retoucher det .	\$7.50 ea65
Huile ent de Petrole " 3.60 " .35		7.50 " .65
Vernis a Tableaux " 7.50 " .65	French Streatsf de Hartem	5.40 " .50

PROFESSOR DR. BUTTNER'S

PRIMARY VARNISH, PHOEBUS A, AND B

For the Preservation of Oil Paintings Either Old or New

Phoebus A is not a picture varnish, but a preserving and refreshing medium, which does not dry, but penetrates the picture, remains pliable for years and will not crack. It is indispensable for oil paintings, to museums and art institutes, as it easily removes dirt from pictures, without expert knowledge and preserves them in every way. It consists chiefly of volatile oils, Balsam Copaiva and Vaseline Oil, and serves to replace in dried out pictures the vanished substance of the binding medium used in painting and to keep the pictures pliable

Counti	Bottle	2	muce.	Primary Varnish,	Phoebus	A, or	В.	each,	.40
				11	11	4.5	-	-16	.70
-	46	4	10.	- 11	24	44		6.6	1.25
Ex. La	rge"	6	4.5						

H. SCHMINCKE & CO'S

MEDIUMS AND VARNISHES

							-	
Mussini Medium,	No.	2, 8	low d	ryi	ng, Smal	I Bottle	each,	.25
11	44	2.	46		Ex.	Large ' *	66	.65
in.	11		uick d	ry	ing Swal	1 0	EV.	.25
XI.	11	3,	36	-	Ex.	Large "	44	.65
Mussini Varnish		,				4	0	.40
	10	,					116	.50
Amber Varnish	100				n		56	.30
Balsam Copaiva	4. 1		2 oun	ce	Bottle			
Copal Varnish					10		16	.30
Mastic "		-			61		16	,40
	rond.	Oil	0.00		16		I I	.30
Cold Pressed Lin	seed	011			11		16	.30
- 66	16		Raw					
et.	1.5		Boile	d	44		4.6	.30
Retouching Vari	ish				10		6.6	.40
Turpentine Oil I	Recti	fied			11		10	.25
These Liquids	are v	with	out es	ce	ption o	of the	hig	hest

These Liquids are without exception of the highest



FRENCH LIQUID TAPESTRY COLORS

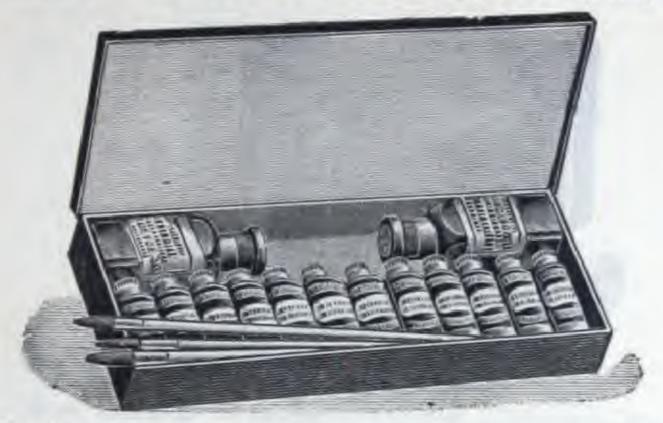
Prepared especially for Tapestry Canvas and other Textiles, in 2 ounce Bottles



Paper Stencils in large variety, for Tapestry work. Send for Special Catalogue

Al	ll colors, except Carn	nine	-				per d	loz., \$2.40 4.80	each,	.25
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Burnt Sienna	17 18 19 20 21 22 23 24 25 26 27 28 29 30 81 32	Veg Em Ver Oliv Pru Car Sep Pay Ivon Car Vell	rama issian igo getab erau ones ve Gi ssian mine ia ne's mine	le Green Green Gray	Blue e reen reen en e	33 34 35 36 37 38 39 40 41 42 43 44 45 46	Madder B	rown er d llow ke ose der ake int	

THE LITTLE ARTISTS' OIL COLOR BOX, NO 9



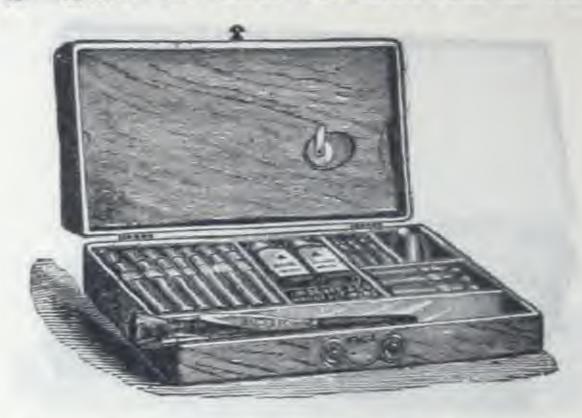
Japanned Tin Box, containing 12 Tubes F. W. Devoe & Co's Artists' Oil Colors, assorted, 3 Fine Brushes, 1 Bottle Oil for mixing and 1 Bottle Turpentine.

The Colors contained in this box are of the best quality, put up in small tubes of special size adapted to the shape of the box, and for the purpose of having the box of compact form, suitable for outdoor sketching, school use, etc. . each, \$1.25

"BEGINNER'S" BOX OF OIL COLORS AND MATERIALS



"SCHOLARS" BOX OF OIL COLORS AND MATERIALS



Polished Wood Box, size 11 inches long, 6 inches wide, 2 inches deep. Containing 13 Single Tubes of F. W. Devoe & Co's Prepared Artists' Oil Colors, 1 Palette Knife, Bottle of Pale Drying Oil and Spirits Turpentine, 3 Sable and Bristle Artists' Brushes, Badger Blender, Palette Cup. Mahogany Palette, Tracing and Transfer Papers, 4 Studies . each, \$2.00 and 1 Academy Board .

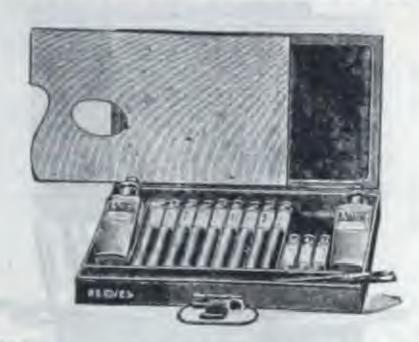
"ACADEMY" BOX OF OIL COLORS AND MATERIALS



Polished Wood Box, size 1314 inches long, 61/2 inches wide, 2 inches deep. Containing 13 Double(or large size) Tubes of F. W. Devoe & Co's Artists' Oil Colors, Bottle of Pale Drying Oil and Spirits Turpentine, Steel Palette Knife, Palette and Palette Cup, Badger Blender, 1 Sable and 2 Bristle Brushes, Academy Board, Tracing and Transfer Paper

. each, \$2.50

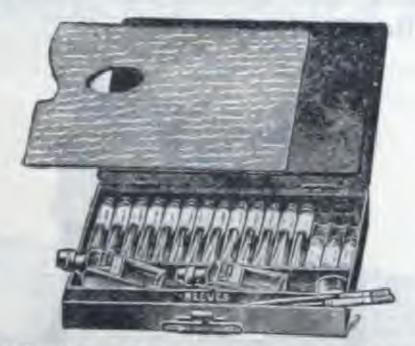
ENGLISH JAPANNED TIN, OIL COLOR BOXES, FITTED



NO. 302. THE STUDENTS' OUTFIT

No. 302. Box contains Mahogany Palette, 2 Brushes, Bottle Oil, Bottle Turpentine and 12 Tubes of Oil Colors . each, \$2.00

Colors: Burnt Sienna, Chrome Yellow, Medium; Crimson Lake, Flake White, Ivory Black, Light Red, Raw Sienna, Raw Umber, Terre Verte, Ultramarine Blue, Vermilion, Yellow Ochre



NO. 303. THE FAVORITE OUTFIT

No. 303. Box contains Mahogany Palette, 2 Brushes, Bottle
Oil, Bottle Turpentine, Oil Cup and 16 Tubes of Oil
Colors each, \$3.00

Colors: Burnt Sienna, Chrome Yellow, Medium; Chrome Yellow, Pale; Crimson Lake, Flake White, Indian Red, Ivory Black, Light Red, Naples Yellow, Prussian Blue, Raw Sienna, Raw Umber, Terre Verte. Ultramarine Blue, Vermilion, Yellow Ochre

English Japanned Tin, Oil Color Boxes, Fitted - Continued



NO. 304. THE ADVANCED OUTFIT

No. 304. Box contains Mahogany Palette, 4 Brushes, Bottle
Oil, Bottle Turpentine, 2 Oil Cups, Palette Knife, 18 Single
Tubes and 1 Double Tube of Oil Colors . . . each, \$4.00

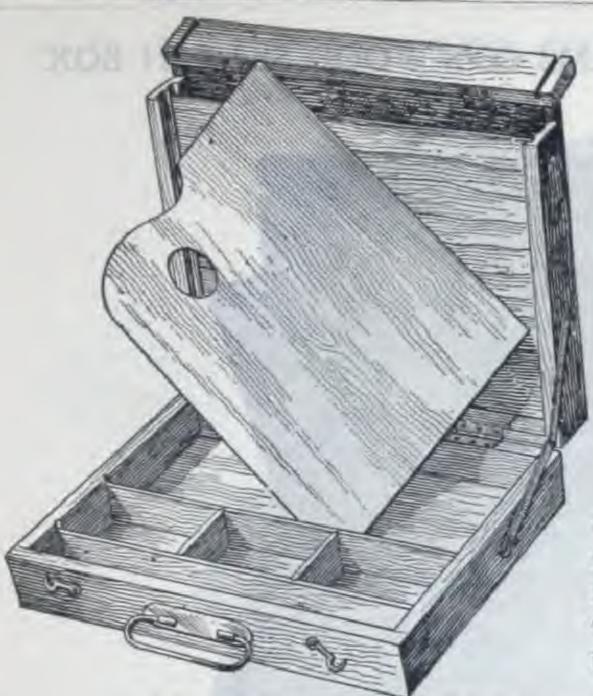
Colors: Brown Madder, Burnt Sienna, Chrome Yellow, Medium; Chrome Yellow, Pale; Crimson Lake, New Blue, Emerald Green, Flake White (Double), Indian Red, Ivory Black, Light Red, Naples Yellow, Prussian Blue, Raw Sienna, Raw Umber, Terre Verte, Ultramarine Blue, Vermilion, Yellow Ochre



NO. 0. THE SCHOOL OF ART OUTFIT

No. 0. Box contains Mahogany Palette, 2 Bristle Brushes and 12 Tubes of Oil Colors each, \$1.50

Colors: Burnt Sienna, Brown Madder, Crimson Lake, Chrome Yellow, No. 1, Flake White, French Blue, Light Red, Raw Sienna, Rose Madder, Vermilion, Vandyke Brown, Yellow Ochre



YANKEE SKETCH BOX

No.100. Yankee Sketch Box, 9 x 12 inches

each, \$3.75

200. Yankee Sketch Box, 10 x 14 inches

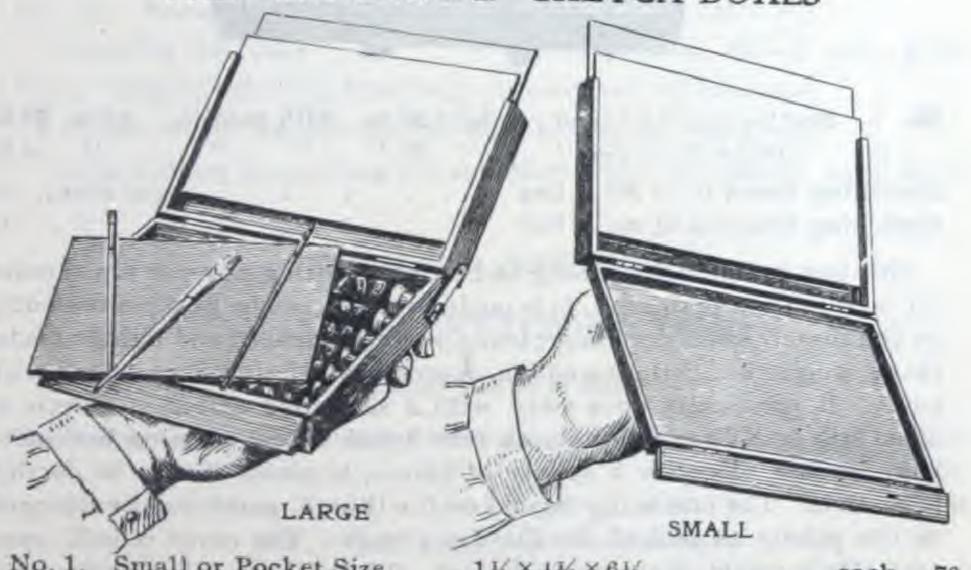
each, \$4.50

300. Yankee Sketch Box, 12 x 16 inches

each, \$5.25

Made of imitation walnut, with two panels in cover, partitions for brushes, paints, etc. This is without doubt the best box for the price in the market

THE "LANDSCAPE" SKETCH BOXES



No. 1. Small or Pocket Size, 14×4%×64 . . each, .70

3. Large Size with Palette, 2½×6¼×8½ . . . " 1.50

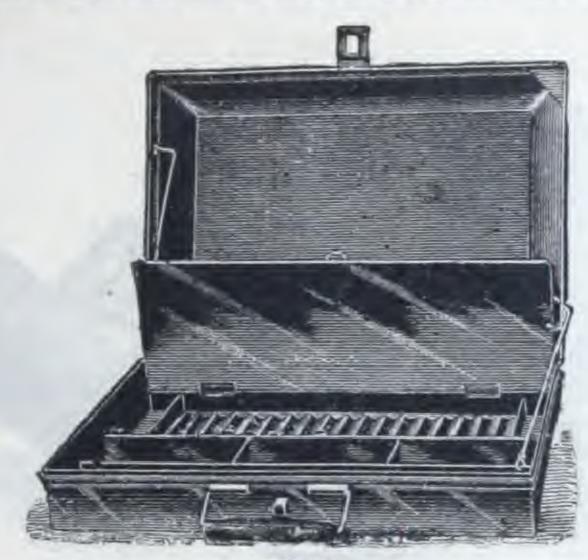
FROST & ADAMS CO'S WOOD SKETCH BOX



	Size 9¼ ×11 56 "10 76 × 15		Total .	26 oz.,	with	palette	each,	\$3.50 4.50
Sketch	ing Board to fi	t No. 1 bo	x .				per sheet	
Sketch	ing Board to fi	t No. 2 bo	х .				11	.15

This box is very light, strong and durable, with grooves in top of cover for carrying wet sketches. It is made so that it can be held conveniently on the thumb when sketching, being so well balanced and lightly made, that it weighs but little more than an ordinary palette when covered with paint. It practically does away with a sketching easel. A palette is fitted into each box, and rests on four small raised posts on bottom of box, leaving room for a supply of paints, brushes, etc., to be carried beneath it. The box being carried on the thumb, paints can be arranged on the palette as desired for the day's work. The cover is held open with side brackets, at any angle desired. Oil Sketch Boards with Smooth, Single Prime, Roman, or Twilled canvas surfaces made to fit into grooves of box cover

JAPANNED TIN OIL COLOR BOXES



NO. 11/6

No. 1. Size 13×9×3¼ in., flat or raised top per doz., \$15.00 each, \$1.50 No. 1½. Same as above, but with lid and spring, securely covering the tubes \$16.00 each, \$1.60 No. 3. Size 14×10×3½, fitted with covered tray for tubes and 4 four-ounce tin oil bottles, double bottom, open end, with 3 slides for holding wet sketches per doz., \$40.00 each, \$3.50

WINSOR & NEWTON'S

OIL COLOR SKETCHING BOXES

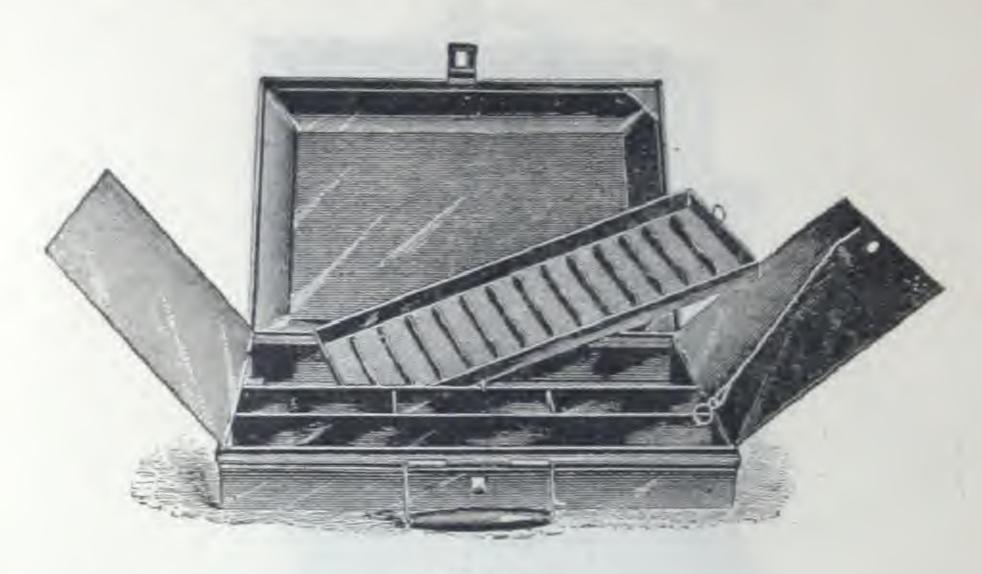
Polished Oak or Walnut

No. 1	. Size	64×	934	in.	each,	\$5.00	No. 4	1.	Size	1014×13	in.	each,	\$8,25
2	. 11	634×	1014	11	- (1	6.00	1	j.	64	11¼×15	10	14	9.50
3	. 16	81/2 X	11	11	- 61	6.50	(3.	11	13¼×17	61	11	11.00

Nos. 1 and 2 are Thumb-hole Boxes

These Boxes are lined with tin, and contain 2 tin oil bottles, double dipper with screw tops, palette and two wood panels

JAPANNED TIN OIL COLOR BOXES



NO. 116

Parties wishing boxes with divisions for double tubes should add the letter D to number when ordering

No. 234. Size 1314 × 934 × 34. Flat top and double bottom for carrying wet sketches. The inside flaps cover the entire contents of the box, thus preventing the displacement of any article per doz., \$23.00 each, \$2.30

JAPANNED TIN OIL COLOR BOXES



ECLIPSE, NO. 1

No. 1. Eclipse. Size, 13×9×3¼, with bevel top. This box will at once recommend itself to all artists by its completeness and the utility of its improvements. It is provided with an extra tray for tubes. The whole is hept intact by a lid, which when closed, is firmly secured by a spring. In addition to the usual space for brushes, an extra tray is provided for wet brushes. This tray is also secured by a spring, so that when the box is closed, no matter in what postion it is carried, the contents cannot be displaced from their proper position per doz., \$22.00 each, \$2.25

No. 2. Eclipse. Size, 13 1/2 × 9 1/4 × 3 1/4, with flat top. Made same as above and has a double bottom with slides for holding wet sketches . . . per doz., \$27.00 each, \$2.70

FROST & ADAMS CO'S ACADEMY BOARDS



Smooth or Rough

6× 9	in.	doz.	:50	each,	.05
9×12	11	14	.95	15	.10
12×18	.07	51.	1.75	1.6	.15
18×24	XX	111	3.00	T II	.25

Extra Sizes

22 X	27	in.	doz.	\$5.00	each,	.45
23 X	30	XX.	*1	6.00	£×	.55

FROST & ADAMS CO'S OIL SKETCHING PAPERS

22×	30	ín.	Smooth	Doz.5	2:40	each,	.25
22 X	30	E.4	Rough	16	2.40	40	.25

MINIATURE IVORIES

For Oil and Water Color Painting

						5		
No. 0.		14×2%	each, 45	No. 7.	Size 3	X33	each,	\$2.20
1.		1%×2%	.55	8.	" 3	7 × 4 17	KK.	2.50
2.	1.6	2%×2½	.65	9.	11 3	1/2×43/2	3.6	3.00
3.	XK.	21/4×21/4	.90	10.		×5.	110	4.00
4.	E.C.	23/2×3	1.25	11.	11 4	14×514	16	6.00
5.	2.5	256×314	" 1.50	12.	95 4	35×6	4.6	7.00
G.		234×334	" 1.80					

RAGGED-EDGE CARDS

For Oil or Water Color Painting

21/2	×	4	4	in.	er hund.	\$1 50	per dor.	, 18	534	×	534	in	per hund.,	\$2.50	perdon	., .56
4					21	2.00			33							1,20
412	×	6	36	58		2.50	4.0	.36	6	×	6	4.4	11	3.00	335	.50
5	×	7		17	0	3.00	2.6	.60	10	8	12	80	6.0	12.00	66	1.50
35	×	3	3/2	.00	316	1.50		.24	7	×	7	5.0	- 66	3.50	46	.60
4	×	4		10	11	2.00	4.6	.30	7	×	9	XX	11.	9.00		1.20
61/2	×	-8	1/2	1.8	0.0	4.00	12	-60	8	×	12	1.1	44	12.00	116	1.50
8	X	10		4.0	11	9.00	A.5	1.20								

WINSOR & NEWTON'S

LONDON-OIL-SKETCHING BOARD

Made in all Canvas Surfaces, as follows

Rough, Smooth, Roman and Ticken, making a good hard surface to work on. They are light and easy to carry, will not warp and are used in Studio work as well as for outdoor sketching

SUPERIOR TO ACADEMY BOARDS

5½ × 7½ perdozen, .50 each .05 | 11×15 perdozen, \$1.80 each, .15 7½×11 ' .90 '' .10 | 15×22 '' 3.60 '' .30 22×30 perdozen, \$7.20 each, .60

RUSSELL'S CANVAS BOARDS

Very Desirable for Outdoor Sketching in Oil

4× 6		each,	.10	10×12		each,	.35	14×18	+	each,	.50
4× 8		11	.12	10×14	4	116	.35	14×20		44	.50
6× 8		4.6	.15	10×16		4.6	.35	14 × 22	+	1.6	.60
6 x 10	91	16	.20	10×18		14	.40	14 × 24		60	.65
6×12	2.	11	.20	10×20		4.6	.40	14×26		66	.70
8x 10		3.6	.25	12×14		3.6	.35	14×28		**	.75
8×12	140	11	.30	12×16		110	.40	16×20		86.	.65
8×14	+	11	.30	12×18		11	.45	16×22		44	.70
8×16	14.1	- (1	.35	12×20		166	.50	16×24		3.6	.75
9×11	20	-11	.30	12×22		144	.50	16×26		66	.80
9×13		33	.35	12 × 24		136	.50	18×22		5.6	.80
9×15	4	11	.35	14×16		-16	.45	18×24		16	1.00
9×18	-	19.9	.40	1			1				

GILT BEVELED EDGE CARDS FOR WATER COLORS

A THE RESERVE OF THE PARTY OF T

C. P. WHATMAN'S SURFACE. BOXES OF 50 CARDS

3 ×41/2	inches,	*			per 100	cards,	\$2.50	per doz.,	.36
3½×5	61			-		- 66	3.50	11	.48
4 ×5¼	11		 4		- 11	8.6	4.50	12	.60
4½×6	40				116	44	5.50	40	.75

LEATHER BOARD, OR COMPOSITION PLAQUES

Prepared for Oil Painting

PLAIN, ROUND

6	nches	per doz.,	\$1.80	each,	.15	16 i	nches	per doz.,	\$7.00	each,	-60
7	4.4	- 11	2.10		,20		4.5		9.80	8.6	.89
8	34	335	2.50	4.1	.25	20	1.0	10	15.00	X.c.	1.35
10	166	131	3.20	44	.30	22	31	116	18.00	-66	1.55
12	44	1.6	4.20	6.3	.40	24	3.0	16.	21.00	KC-	1.80
14	61	41	5.60	- 22	.50	540					

FROSTED PORCELAIN PLAQUES

ROUND

5 1	inches	per doz.,	\$1.75	each	.15	10	inches	per doz.,	\$5.40	each,	.50
8	44	14	2.25		.20			31	7.80		.65
7	16	1.6	2.75	2.5	.25	14	14	11	10.20	11	.90
8	66	18	3,25	18	.30	16	17	11.	16.10	1.6	1.40
9	33	16	4.50	3.7	-40	18	4.6	11.	20.00	-10	1.75

CELLULOID IN SHEETS, FOR DECORATING

POLISHED ONE SIDE, DULL FINISH OTHER SIDE

White	No. 44.	Size	20×50,	thickness	1000,	per shee	t. \$1.50
Semi. Trans	300.	66	X.L	10	44	44	2.00
Transparent .	301.	4.9	91	14	7.6	43	2.60
Dark Pink .	359.	4.7	-34	25	14	5.7	1.50
Light Pink .	361.	11.0	3.6	4.8	131	- 0	1.50
Light Lavender	403.	1.9	1.6	48	1.6	1.1	1.50
Dark Lavender	404.	XV	46	-13	0.0	43	1.50
Light Cream .	430.	11.	19.0	158	14.	9.0	1.50
Medium Cream	432.	199	26		14	1.8	1.50
Dark Cream .	431.	(4)	11	-	14	3.5	1.50
Light Green .	470.	83.	1.51	3.0	160	6.0	1.50
Dark Green .	472.	4.9	4.1	.35	14	11	1.50
Light Blue .	657.	3.6	10.2	9.8	3.6	4.1	1.50
Dark Blue .	658.	4.4	96	0	16	44	1.50

Samples furnished gratis

THIN PORCELAIN PANELS

				PL	AIN			
5	inches		-	each, .08	5× 8 inches			each, .23
				.10	6× 8 "			. 24
4	66	-		.09	8x 8 "			-30
6	168	14		.13	5×10 **	-	-	.28
S	40.1			17	8×10 "		63.0	37
6	141		-	.17	8×12 "			.42
7	41			.20	10×12			50
	84686	4 ** 6 ** 8 ** 6 **	8 "	8 "	5 inches . each, .08 810 409 613 817 617	8 "	5 inches . each, .08 5× 8 inches	5 inches . each, .08 5 x 8 inches

FROST & ADAMS CO'S

PLAQUE HANGERS, WHITE WIRE

With Spiral Spring Guards

W	No. 2191.	Capacity	6 to	7 in.	per doz.,	\$1.50	each,
	2192.	100	7 to	9 "	**	1.75	-66
200	2193.	**	9 to	11 "	44	2.00	16
100	2194.	**	11 to	13 "	144	2.50	16
Water land	2195.	++	13 to	15 "	de.	3.00	11
	2196.	**	16 to	18 "	X4	3.50	16
	2197.	4.6	18 to	21 "	16	5.00	11

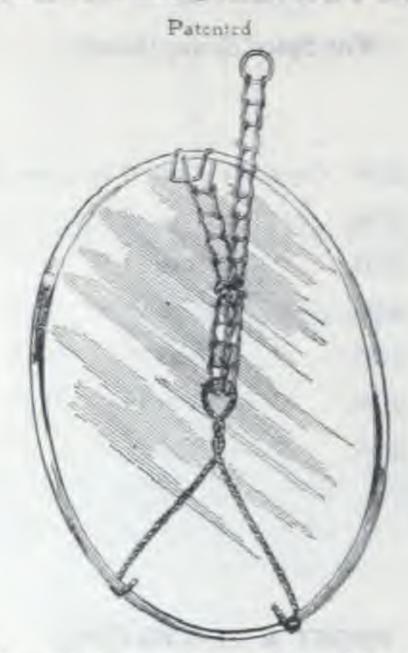
FROST & ADAMS CO'S

PLAQUE HANGERS, BRASS WIRE

								680
No. 4191.	Capacity	6 to	7 in.	per doz.,	\$2.00	each,	.15	1
4192.	**	7 to	9	11	2.25	**	.20	23
4193.	66	9 to	11 "	10.	2.50	10	,25	
4194.	46	11 to	13 "	-64	3.00	18	.30	THE TOTAL STREET
4195.	21	13 to	15 "	10	4.00	16	.35	
4196.	**	15 to	18 "	44	4.50	#	.40	
4197.	**	18 to	21 "	49	6.00	11	.50	
							1	
							0	

Illustrated Catalogue of Wire Goods furnished on application

FROST & ADAMS CO'S CHAIN PLAQUE HANGERS



This hanger is the most practical adjustable hanger made. It is adjustable both for diameter of Plaque and hanging pitch. If properly adjusted it is the most secure made. The heavier the plaque or plate, the more firmly it is held

								9		
						9		U		
				9		12				
		2		1		1				
	9.	1				1		3		
	1	*		*		1		1		
	1	1		/\		/	1	1		
	No. 91	No. 92		No. 93		No. 9	4	No. 95		
No. 91,	For size	Plaque 5	to	7 inches	+	. 1	per doz.,	\$2.50	each,	.20
92,	41	16 7	to 1	0 inches		4	4.1	3.00	24	.25
93,	.89	11 8	to 1	2 inches	+	2	93-	3.60	11	.30
94,	4.8	11 11	to 1	5 inches		60	161	4.20	4.4	.40
95,	.53			8 inches		+	9,6	5.50	- 4	.50
Illust	rated Ca	talogue o			s fu	rnishe	ed on app	olication	1	

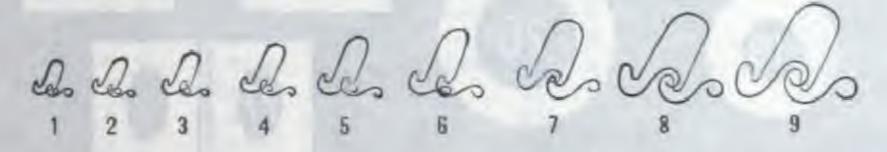
FROST & ADAMS CO'S

PLAQUE OR CARD EASEL, ROCKER DESIGN

Popular Grade. Gold Lacquer Finish



This easel is of the popular market grade and is of equal or superior quality to any other made. Observe dimensions of each and beware of marked up sizes in comparing prices



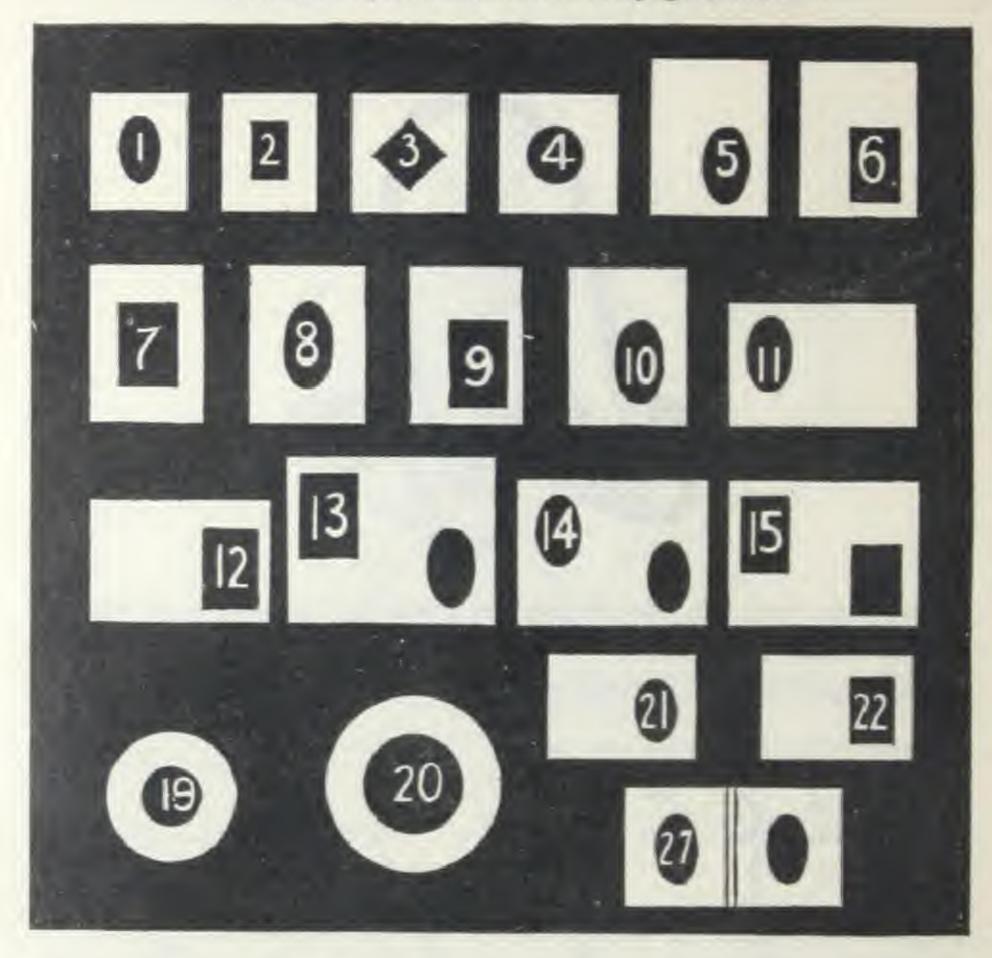
Hight, 4 in., 4¼ in., 4¾ in., 5½ in., 6¾ in., 7½ in., 8½ in., 9 in.,10 in. Width, 2 in., 2¼ in., 2¼ in., 8¼ in., 3¼ in., 4½ in., 5 in., 5½ in., 6½ in.

No	0.1,	per doz	., \$1.50	each	, .15	No. 6,	per doz	., \$4.20	each	, .35
	2,	10	1.80	110	.20	7,	31	5.00	16	.45
	3,	- 44	2 40	11.	.20	S,	11.	6.00	1.0	50
	4,	n	3.00	ÇE.	.25	9,	10	7.60	.KE	.65
	5,	11	3.60	**	.30	la de				

Illustrated Catalogue of Wire Goods furnished on application

FRAMES FOR DECORATING

For Description and Prices see page No. 54



SATIN WOOD FRAMES

Natural Wood Color, suitable for Burning, Painting and Monograms

No.	Size		Size			Doz.	Each
1.		44, oval opening, in	n centre 1%×2%	-		\$2.50	.20
2.		434, square	158×2¼	-	4	2.50	.20
3.	434 X	4¼, diamond "	" 2 ×2			2.50	.20
4.		434, round "	" 2 × 2		-	2.50	.20
5.	6 ×	8, oval " 1	right corner 234×234	12	2	3.50	.30

SATIN WOOD FRAMES - Continued

No.	4	Size					Size			Doz.	Each
6.	6	×	8,	square o	penin	ng right corne	r 234 × 234			\$3.50	.30
7.	7	×	9,	equare	16	centre	31/2×5	+	+	4.50	.40
8.	7	X	9,	oval	1.6	44	3½×5			4.50	.40
9.	7	X	9,	square	66	right corner	31/2×5			4.50	.40
10.	7	X	9,	oval	66	110	3½×5			4.50	.40
11.	8	X	12,	oval	4.6	45	31/2×5			6.00	.50
12.	8	X	12,	square	11	11	31/2×5			6.00	.50
13.	10	×	13,	1 square 1 ova	111	sides	31/2×5			8.00	.75
14.	10	×	13,	2 oval	11	11	31/2×5			8.00	.75
15.	10	×	13,	2 square	**	44	3½×5	14		8.00	.75
19.	5	×	5,	round	10	centre	2 ×2			4.00	.35
20.	7%	2×	71/2.	round	11	**	3 5% × 3 5%			6.00	.50
21.	41/			oval	11	right corner	134×234			8.00	.25
22.	41/	X		oval	41	**	134×234		1	3.00	.25

WHITE WATER COLOR, PADDED FRAMES

The following colors made to order, Blue, Ruby, Golden Rod, Gray, Maroon, Olive

No.	Size				Size			Doz.	Each
- 1.	4 ×	434, oval ope	ning	in centre	11/4 × 23/4			\$1.70	.15
2.		434, square	11	64	158×214	1 6		1.70	.15
3.		434, diamond	10	(1	2 ×2			1.70	.15
4.		434, round	2.6	**	2 ×2	-		1.70	.15
5.		8, oval	66	right corner	234×334			2.80	.25
6.		8, square	11	C1	234×334			2.80	.25
7.		9, square	15	centre	31/2×5			3.50	.30
8.		9, oval	40	11	31/2×5			3.50	.30
9.	200	9, square	11	right corner	31/2×5			3.50	.30
10.		9, oval	11	66	31/2×5			8.50	.30
11.	8 ×1		11	56	31/2×5			4.50	.40
12.	8 ×1	- P	44	54	31/2×5			4.50	.40
13.	10 ×1		11	sides	3½×5			6.00	.50
14.	10 ×1	Part of the second seco	18	14	31/2×5			6.00	.50
15.	10 ×1		11	4.6	31/2×5			6.00	.50
19.		5½, round	10	pad surface	21/2×21/2			3.00	-80
20.		64, round	44	12	314×314	4		4.50	.40
21.		6½, oval	4.6	right corner	134×234			2.50	.20
22.		61/2, square	93	11	134×234			2.50	.20
56.		434, square	330	4.6	11/2×21/2			1.50	.12
57.		614, square	16	66	21/2×33/4		-	1.75	.15
58.		9, square	-00	0.	334×5			2.25	.20
160.	8 ×		44	egg shell	31/2×31/2	- 4		3.60	.33

Special Catalogue of Water Color Frames furnished on application

THE IMPERIAL PASSEPARTOUT FRAME, WHITE

VERY

ARTISTIC

AND

POPULAR



WITH

AMATEUR

AND

PROFESSIONAL

ARTISTS

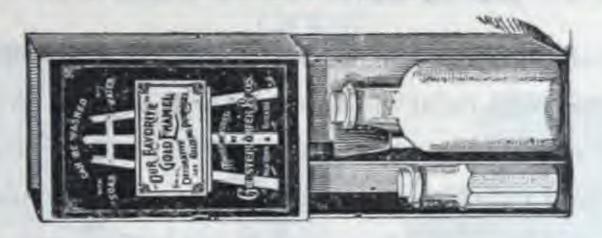
Size					Size	Doz.	Each
6× 8,		oval	opening,	rough surface,	236 × 336	\$5.00	.45
11X 8,		square	148	**	21/8 × 33/8	5.00	.45
8×10,	cabinet,	oval	- 0	311	31/2×5	8.00	-75
8×10,	- 11	heart	10	41	11	8.00	.75
8×10,	111	round	14	z i	44	8.00	.75
8×10,	- 11	square	1.6	-11	44	8.00	.75
10×12,	8.6	oval	10	44	16	12.00	1.00
10×12,	16	round	44	11	24:	12.00	1.00
10×12,	11	square	4,6	11	341	12.00	3606.00
10×13,	4.6	oval 2	46	10	266	14.00	1.00
10×14,	44	oval 1	6.6	16	11		1.25
10×14,	12	square	-11	4.6	44	14.00	1.25
12×16 ,	-54	oval 3	- 11	11	.0	14.00 20.00	1.25

DIAMOND DUST, GLITTERS AND BRILLIANTINES

For Decorating Postal Cards, Souvenirs, Etc.

Silver Brilliautin			-	*			per 1b.	\$2.50	per oz	15
Silver Blue Brilli	anti	ne					43	3.00	* **	.20
Silver Red Brillis	anti	ne	9				-71	3.00	- 11	.20
Cashmere Brillia	ntiu	е	-		,		4.5	3.00	11	.20
Gold Brilliantine				-	41		13	2.50	(1)	.15
Diamond Dust					100		1.6	.75	4.6	.05
White Frosting			9	-	2		1.6	.50	1.4	.05
Fine Mica	*				8	- 4	46	.50	11	.05

"SAPOLIN" GOLD ENAMEL, WASHABLE



						each	, .15
2						10	.25
						11	.40
						X 6	.75
							each

We have overcome all the objections that can be urged against gilding preparations and now offer you a Washable Gold Enamel — a perfect gilding preparation. It is so simple to apply that the most inexperienced can use it to perfection. It dries in a few minutes with an enamel finish presenting a brilliant gold surface, on which no brush marks are visible. At little cost and with very little labor

BRONZE POWDERS

All Desirable Shades, including Green and White

We have the following shades: Rich Gold, Deep Gold, Pale Gold, Green Gold, Red Gold, Green, Fire, Crimson, Copper, Carmine, Light and Dark Blue, Orange, Lemon, Flesh, Maroon, White or Silver, Nickel, Peacock Blue, Cream, Turtle, Lilac

er ounce 20 | No 4 000

No. 10,000

210, 10,000		. 1	er oun	C, .2U	140. 4,000		4.1	ber onn	ce, .10
8,000			16	.18	3,000	-		14	.11
6,000			**	.15	2,000			166	.10
5,000			11	.14	1,000			16	.09
Patent Em	erald,	Pate	ent Dar	k Gree	n. Patent	Light	Gre	en.	
Patent	Viole	et, P	atent D	ark Bl	ue, Patent	Ligh	it BI	ue.	
Patent								per oun	ce, .20

FLITTERS

Made from Foil Paper, in small Flakes, but more Brilliant than Brocades

First Quality	y B	lue, I	Dark	Gree	n, Li	ight	Green	n, Or	ange	, Pur	ple	
and Red			-	2	41				2	- 4	per oun	ce, 18
Assorted col	ors	, mix	er:	*			*		4	4.	11	.16
Gold and Co	PP	er	*		4	4			141		-0-	.10
Silver				14			*		4	4	4.0	.14

JAPANESE GOLD PAINT

The finest Gold Paint in the world. Decorates anything and everything. Japanese Gold Paint will appear so brilliant, that only experts can tell whether it is coated with genuine gold leaf or not. For this reason the Japanese Gold Paint is and can be used as a perfect substitute on all articles where Gold Leaf has been used heretofore



No. 3.	Small size,			- 2	5.	0	4	each,	.10
2.	Regular size				10	7.1	11/4	88	.25
1.	Large size						-	11	.40

DIRECTIONS

Shake the bottle until its contents become fully mixed, and apply with the accompanying brush. Keep well corked when not in use

Special price for gross lots

JAPANESE GOLD INK AND ENAMEL BRONZING LIQUID



Write your letters with Japanese Gold Ink, which writes as fluently as common ink, is used with any ordinary pen, dries very brilliant, does not thicken and requires no preparation, being ready for immediate use. A perfect, smoothly flowing ink in every respect, it is the only satisfactory article of its kind on the market, and is one of the best selling novelties ever offered. The low price at which we quote it places it within the reach of all

FROST & ADAMS CO'S ENAMEL BRONZING LIQUID, WASHABLE

1 Ounce Bo	ttles,	+					,	per	lozer	1, \$1.	00	each	, .10
2 "	44							11		1.	.80	1.6	,20
Half Pint	46				4	4					*	1.0	.30
Pint	4.6		4										.60
Quart	16						-					1.5	1.00
Gallon Cans				4								5.6	3.00

We have succeeded in producing a Bronzing Liquid which can be used in connection with Bronze Powder for outdoor gilding, fine decorating and on articles subject to handling and rubbing. It can even be washed without injury to its appearance, as the Liquid spreads a film over the Powder, making it impervious to water as well as to the atmosphere.

GERSTENDORFER BROS.

"G" ALUMINUM ENAMEL



An Aluminum Paint which puts a smooth washable Enamel finish, with frosted silver effect on any surface. It is always bright and needs no polishing

It is absolutely proof against moisture

1-6 p	int Cans	* "		-				141	-1	100	-	.15
14	47	6	+	*		14		è		¥		.25
32	15		÷				4	×			-	.40
1		*		-	41	2	4	4	-			.75

Put up in partition boxes containing I dozen cans

GERSTENDORFER BROS. "STAR" ENAMEL



This cut is the exact fac-simile of the beautifully decorated ¼ Pint Can in which the Star Enamels are put up

It is made up in 29 different colors, as follows:

No.	1.	White	No. 15.	Orang	e	
	2.	Rose	16.	Light	Blue	
	3.	Ivory	17.	Flesh		
	4.	Pale Blue	18.	Violet		
	5.	Yellow	19.	Dark (Green	
	6.	Moss Green	20.	Terra	Cotta	
	7.	Vermilion	21.	Blue-C	Freen	
	8.	Silver Gray	22.	Royal	Blue	
	9.	Pink	23.	Black		
	10.	Turquoise Blue	24.	Cardin	al Red	
	11.	Light Green	25.	Bicycl	e Ruby	
	12.	Maroon	26.	ic	Ash	
	13.	Lilac	27.	110	Yellow	
	14.	Oak Brown	28.		Blue	
Size	No.	1 each, .15	Size N	o. 3 .	4 4	each, .40
11	ir.	2	11	4 .		.75

"SAPOLIN" VARNISH STAIN





Sapolin Var	nish Stain,	¼ pint cans	+				each,	.15
11	11	1/2 "		-	*		- 61	.25
- 11	41	1 "			-		11	.40
- 11	44	1 quart cans					*66	.75
44	41	1 gallon cans				1.0	3.5	2.00

Made in Light Oak, Dark Oak, Walnut, Cherry, Mahogany, Rosewood, Forest Green, Delft Blue, Ebony and Natural or Clear

Quick drying: beautiful, glossy finish produced by one coat of "Sapolin" Varnish Stain. A brilliant, transparent color, stain and varnish at one application

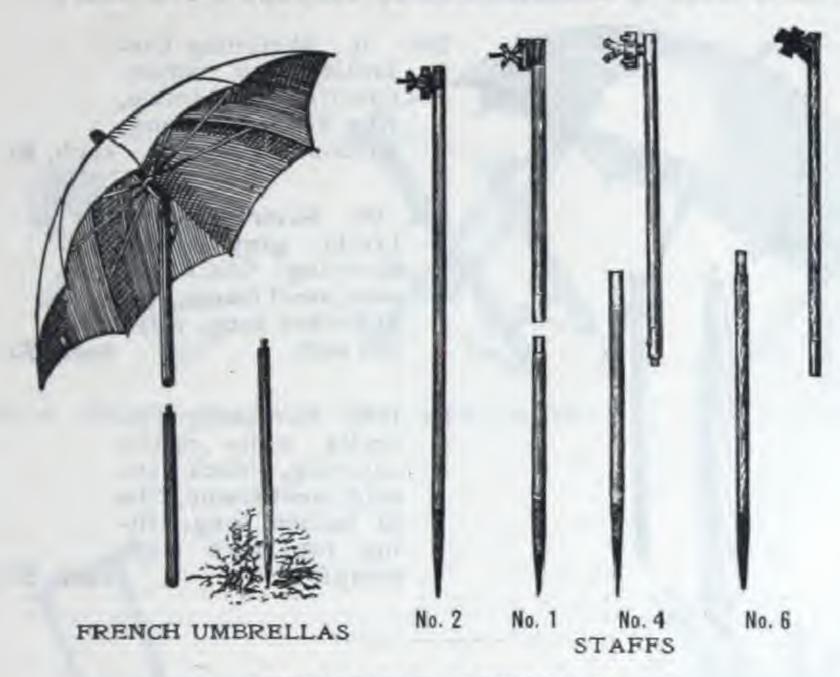
"STAR" BATHTUB ENAMEL

Star Bath	Tub	Enamel,	14	pint	cans	*		+	4.	+	each,	.15
**	4.6	44	3/2	11	44			-			14	.25
4.4	4.1	11	1	**	4.6			2			16.	-40
3.6	14	16	1	quart	44			v.			116	.75
6.6	60	19.5	1	gallo	2 44	*	4	4			ix.	4.00

The smaller sizes are put up in cartons containing one dozen cans

Adapted for bathtubs, washstands, flower pots, as well as for walls, ceilings and woodwork of bathrooms; steam and moisture have no effect on it. It will not crack, blister or peel off, and resists hot and cold water. Produces a marble-like, glossy surface, as hard and lasting as porcelain

SKETCHING UMBRELLAS AND STAFFS



SKETCHING UMBRELLAS

DIEL I CITITO CIVIDICELLAS		
French Gray Linen, 28 inch, with Screw-jointed Staff in 3 parts, square-jointed steel shoe, nickel-plated trimmings steel frame, turn-over joint, complete American Gray Linen, 30 inch, with Slip-jointed Staff in 2 parts, square-jointed iron shoe, steel frame, turn-over	each,	\$9.00
joint, complete	**	5.00
Tourist Gray Linen, 31 inch, without Staff	43	3.00
Scholar's Gray Linen, 32 inch, without Staff	1.6	2.50
The Tourist and Scholar's can be used with any Staff		
UMBRELLA STAFFS		
No. 1. Jointed, slip-joint, japanned trimmings, iron shoe, 54 inches long 2. Plain Staff, japanned iron clasp and shoe, 46 inches		\$1.50
long	46	1.25
clasp and shoe, 48 inches long		2.50
angle, iron shoe, 56 inches long	4.6	2.75

SKETCHING UMBRELLAS, WITHOUT STAFF



No. 0. Sketching Umbrella, buff cotton covering, steel frame, ribs 31 inches long, without staff . each, \$3.00

No. 00. Sketching Umbrella, gray cotton covering, black inside, steel frame, ribs 31 inches long, without staff . each, \$3.00

No. 000. Sketching Umbrella, white cotton covering, black inside, steel frame, ribs 31 inches long, tilting top, with staff, complete . . each, \$5.50

FRENCH SKETCHING STICKS AND STOOLS

Best Quality, Very Strong







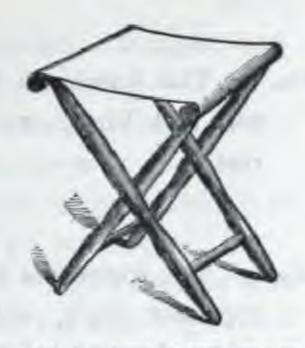
NO. 683

No. 683.	French	Sketching	Stick,	with	canvas s	eat	4	. 6	each;	\$2.25
684.	**	11	11	11	leather s	eat			14	3.00
685.	476	CE.	Stool	X.E	canvas se	eat			4.6	1.65
686.	48.	An.	16.0	**	leather s	eat			**	2.35

SKETCHING SEATS



NO. 4. FOLDING SEAT NO. 1. FOLDING SEAT





NO.5. CLUB SEAT

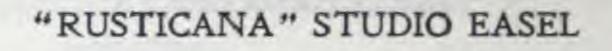


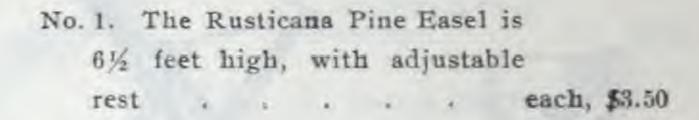
NO. 11. FOLDING CHAIR



NO. 3. F. & A. CO'S SEAT

No. 1.	Square Folding Canvas Seat	4				each,	.40
3.	F. & A. Co. Folding Club Seat, C.	anvas,	Sq	uare	Тор	16	.40
4.	Square Folding Carpet Seat .	*	7				.75
5.	Club Seat, Light American .	UK				164	.80
11.	Square Folding Canvas Seat with	Back	*			- 11	.50



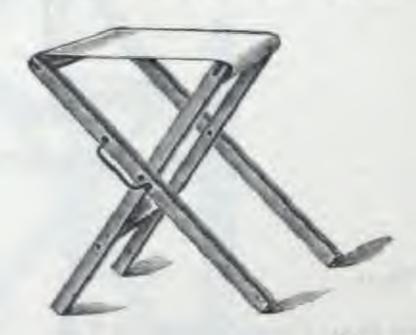


No. 2. The Rusticana Pine Easel is

6½ feet high, with adjustable
rest and weighted base . each \$4.00

When not in use, can be closed up and put in a corner. This Easel is now used in all the large Art Schools

CAMP STOOL OR SKETCHING SEAT





NO. 710

No. 710. Sketching Seat each, .65
Made of Ash Wood. Square Folding, Strong Canvas Seat with Brass
Handle

THE IMPROVED SKETCHING EASEL

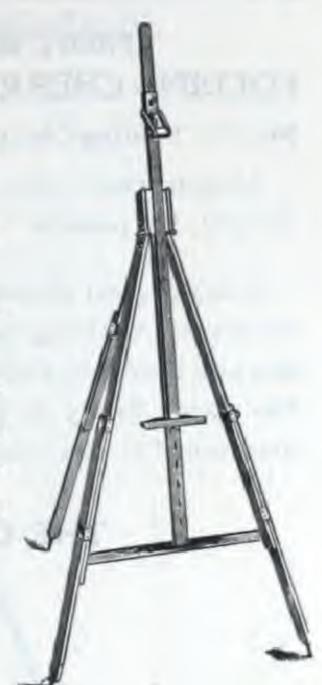
Easel complete \$4.50

This is one of the simplest, strongest and firmest Easels on the market today.

It is made of cherry, nicely finished, with brass mountings and sliding legs.

When shut up in its most compact form it is 31 inches long and weighs 31/2 pounds.

It can be opened so that it will stand six feet high, and is so made that the side legs are a support to the canvas when painting, and the device for holding and inclining the canvas at the top is very ingenious and practical



THE PORTFOLIO CAMP STOOL

THE FRIEND OF THE WEARY





Unique, strong, compact; easily handled and carried; it cannot get out of order. Invaluable for Artists and Amateurs, Sportsmen, Tourists, Baseball Grounds, Race Tracks, Excursionists; in fact for all. It is made of steel and it only weighs about two pounds

Japanned, in box, Closed, 9×12×1/2 in. Open, 19×14×8 in. each, \$1.50

FROST & ADAMS CO.'S FOLDING CHERRY SKETCHING EASEL

No. 15. Folding Cherry Sketching Easel each, \$1.25

Length when open, 47 inches, closed, 27 inches. Weight, 11/2 pounds

Note the great improvement in this Easel over the old style. A sliding bar, which can be adjusted to any size canvas by a thumb-screw at the back, holds the sketch firmly in place and prevents its being overturned by the wind



THE CROSS SKETCHING EASEL



Patented, United States and France. Received Medal of M. C. M. A., 1887
Weighs 3 1/4 lbs., 36 inches long, closed each, \$5.50

The simplest, strongest and most practical easel ever made. Now used by all the leading French and American artists. The only easel in which the canvas gives firmness to the easel, which inclines the canvas forward, and which carries any canvas up to 5 feet, high enough to work upon while standing

THE WOODBURY SKETCHING EASEL



The best Sketching Easel in the market . . . each, \$3.00

The stretcher is fastened to the Easel, thereby holding the canvas firmly in any desired position. It can be adjusted to any height, as well as to uneven ground, and used either standing or sitting. A canvas of any size can be used. It packs very closely, and weighs but 2¼ pounds

DIRECTIONS FOR SETTING UP EASEL

1st. Screw the two screw-eyes into the bottom of stretcher about 12 or 15 inches apart.

2d. Screw the back yoke (connected with back rod) in centre of top of stretcher, then put the rods through the two bottom eyes, up through back yoke and adjust to height desired, screwing in top screw-eye to make firm

THE RANGER SKETCHING EASEL



NO. 17

No. 17. The Ranger Sketching Easel . . .

each, \$5.00

Height open, 70 inches. Size when closed, 38 x 3 x 2 1/4 inches. Weight 3 pounds. Will hold canvas from 80 inches high, to extreme small sizes. The Ranger Sketching Easel is pronounced the most unique sketching easel by prominent artists. Ingenious devices imparting a tone of smartness are evidenced in its construction.

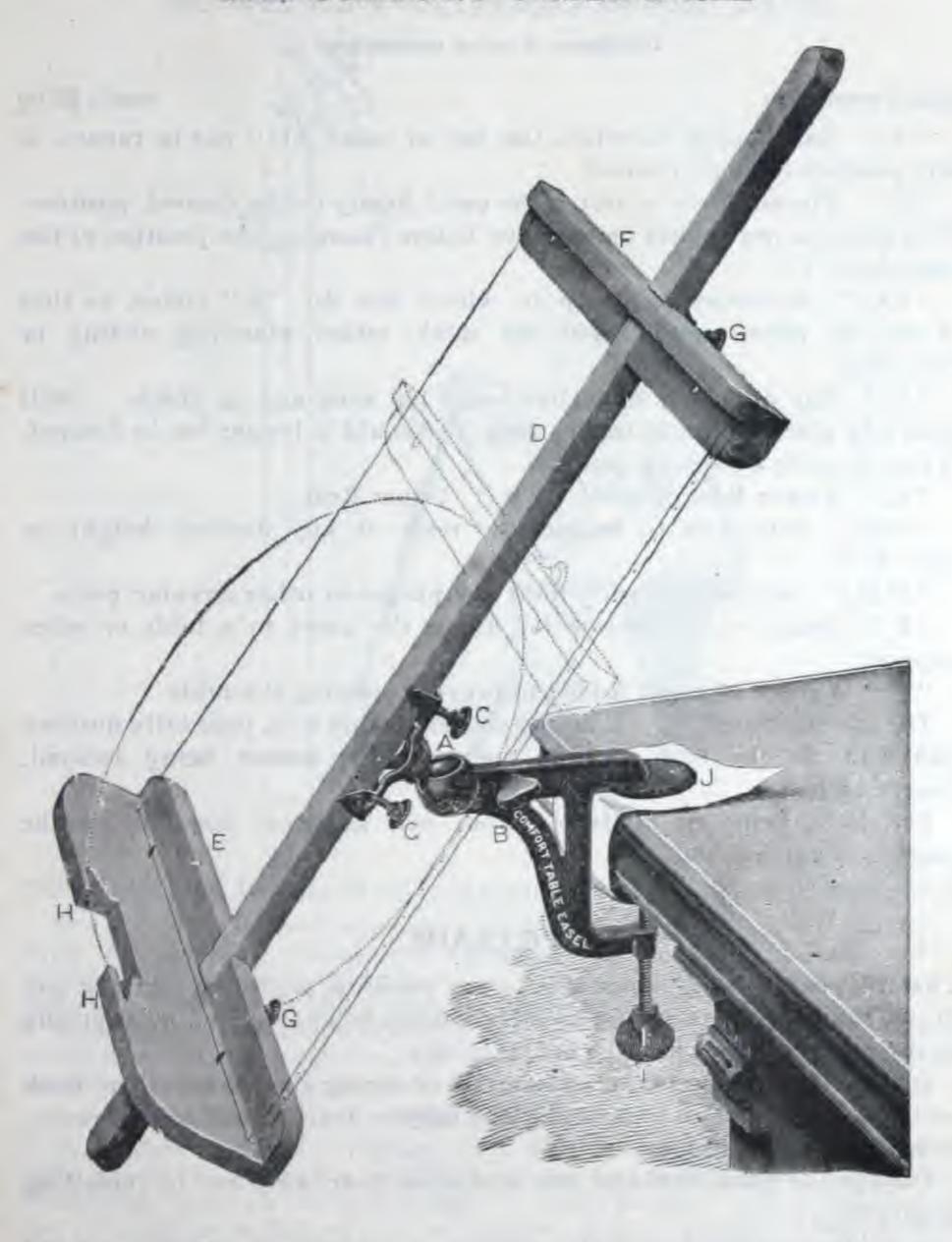
The Tilting arrangement is a highly nickeled bar 19 inches long, which permits the canvas to be inclined at any desired angle and can be adjusted for sitting or standing position

Made of selected hard wood, all fittings nickel-plated; no bother with pins or trays in regulating height of canvas

The Ranger Clamps can be adjusted to any position on front legs and are held to head of easel when closed by spring clasp, making easel compact and easy to convey

A special contrivance is fitted to clamps to hold canvas securely, assuring a firm working surface

THE COMFORT TABLE EASEL



Comfort Table Easel each, \$3.00

THE COMFORT TABLE EASEL

Description of cut on opposite page

Easel complete each, \$3.00

"A." Ball Socket on which the bar or easel "D" can be turned to any position or angle desired

"B." Thumbscrew to fasten the easel firmly in the desired position. This thumbscrew should be loosened before changing the position of the easel-bar "D"

"CC." Setscrews of clamp in which the bar "D" slides, so that it can be raised or lowered for work, either standing, sitting or reclining

"D." Bar or Easel, 33 inches long, 1% wide and % thick. (Will hold any piece within 30 inches long.) Should a longer bar be desired, it can be made by any carpenter

"E." Lower Rest or shelf. "F." Upper Rest

"GG." Setscrews to secure the rests at any desired height on bar "D"

"H H." Notches to firmly hold any plaque or other circular piece

"I." Clamp-thumbscrew for fixing the easel to a table or other support

"J." A piece of paper folded to prevent marring the table

The material used is rock maple and malleable iron, tastefully finished and made in the best possible manner. The screws, being secured, cannot be lost

The Ball, being of malleable iron, will not wear down below the coating of galvanizing

WE CLAIM

That this easel, being adjustable to any position, perfectly portable and firmer than all but the largest easels, cannot be approached by anything in the market for all work of ordinary size

It is particularly welcome to Invalids (it being also an excellent book and music holder); to water-color and crayon Artists; and as a drawing-board and plaque holder

Used in the household and the studio, on board ship and in travelling generally

It folds up very compactly, making a package 33 inches long and about 2 inches square and weighs 4½ pounds

MUNSELL'S PORTFOLIO BRACE EASEL



Size, 34 in. long folded; 60 in. long open. Weight, 17 ounces each, \$2.00

The lightest and most economic easel in the market, and only practical form for crowded classrooms, allowing nearly double the number of students possible with other forms of easel. Takes as much room as a cane when leaned in the corner or hung on a nail

The most portable of sketching easels for outdoor work. Does away with thumb tacks or other means of holding the paper. Can be clamped to the crossbar of large canvases for cartoons and large work.

DESCRIPTION

It consists of a head or clamp (A), with thumb-screw (B), adapted to hold firmly the edge of a portfolio, canvas or drawing-board (C), whose lower edge rests on the knees, floor or other support, and an adjustable leg (D), which is hinged (E) to the head so as to permit of any desired height or inclination, while a rubber tip (F) prevents slipping on the floor, and a strip of rubber (G) in the clamp holds firmly the upper edge of the portfolio, and any paper or canvas thereon.

FROST & ADAMS CO.'S

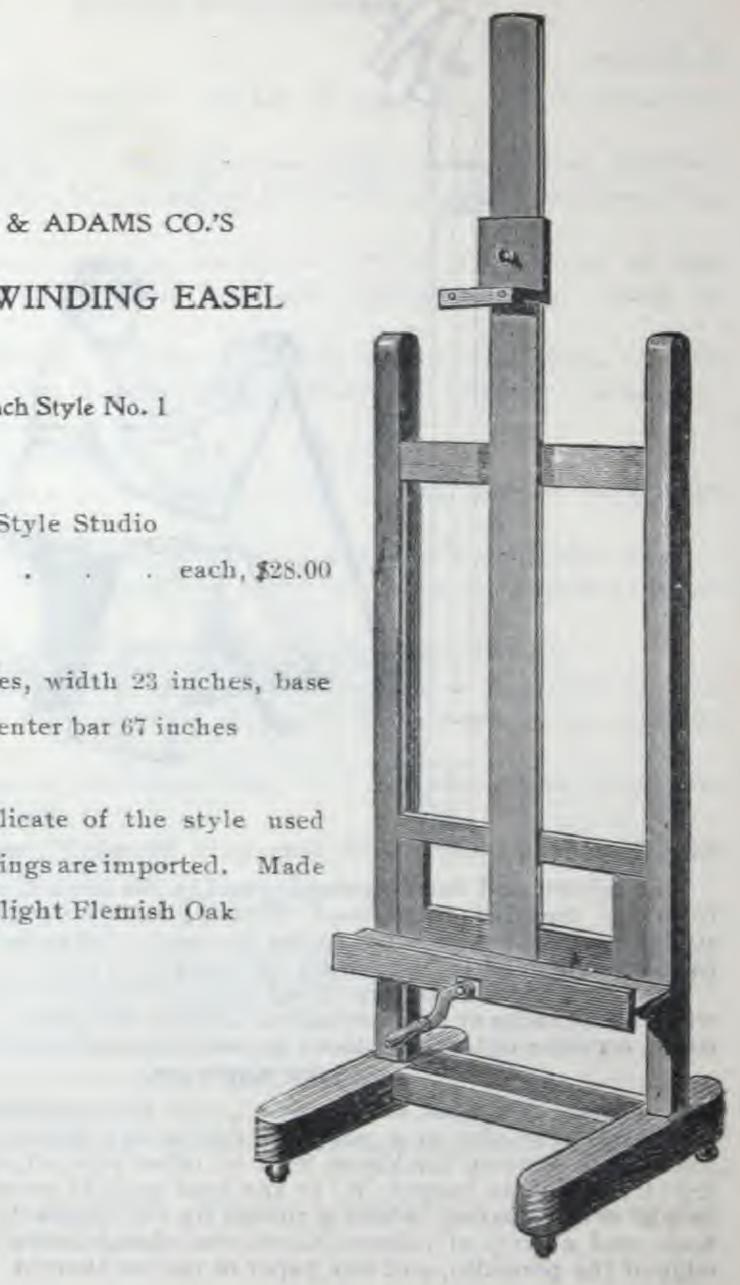
STUDIO WINDING EASEL

French Style No. 1

No. 1. French Style Studio Easel each, \$28.00

Height 72 inches, width 23 inches, base 23 × 25 inches, center bar 67 inches

This is a duplicate of the style used in France, all fittings are imported. Made of Ash stained to light Flemish Oak



FROST & ADAMS CO.'S

STUDIO WINDING EASEL

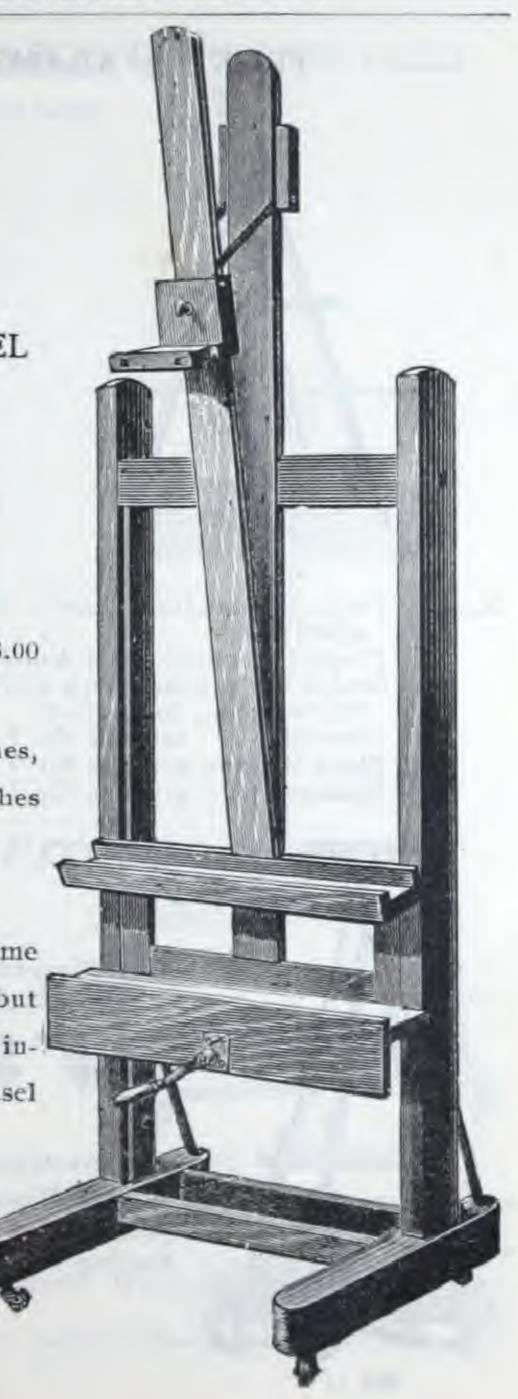
French Style No. 2

No. 2. French Style Studio

Easel . . each, \$46.00

Height 78 inches, width 24 inches, base 25 × 26 inches, bar 66 inches from upper tray

This Easel is made up of the same high grade material as our No 1, but has an additional screw which inclines the canvas. A better Easel cannot be made



FROST & ADAMS CO.'S EASELS





NO.

No.	5.	Framed Stand	ling Easel,	Ash	Wo	od,	with	out	100	20120
		middle bar			4	4			cach,	\$2.50
	6.	Framed Standin	ng Easel, Ash	Wood					14	3.00
	7.	Studio Rack E	asel, with sli	ding	fram	e and	I tra	V:		
		White Wood,							1.2	5.00
	8.	Ebonized,							1.9	6.00
		Black Walnut,			-				18.5	6,25
		Mahogany,					-		11	7.00

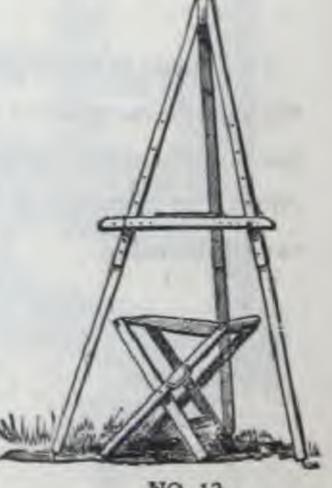
FROST & ADAMS CO.'S SKETCHING EASELS



NO. 11

No. 11. Sketching Easel, Ash Wood, three legs, with pins and tray, folding . each, .70

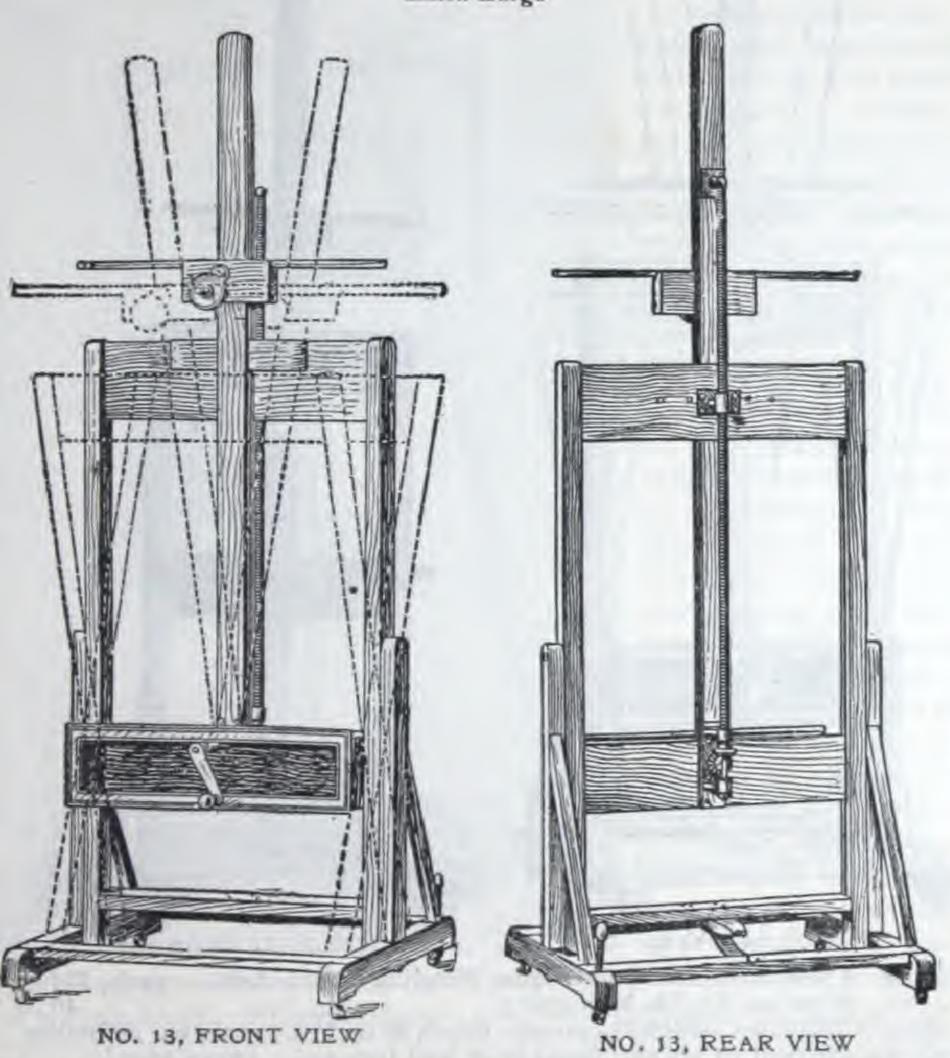
No. 12. Sketching Easel, White Wood, with patent hinge and tray, folding . each, \$1.00



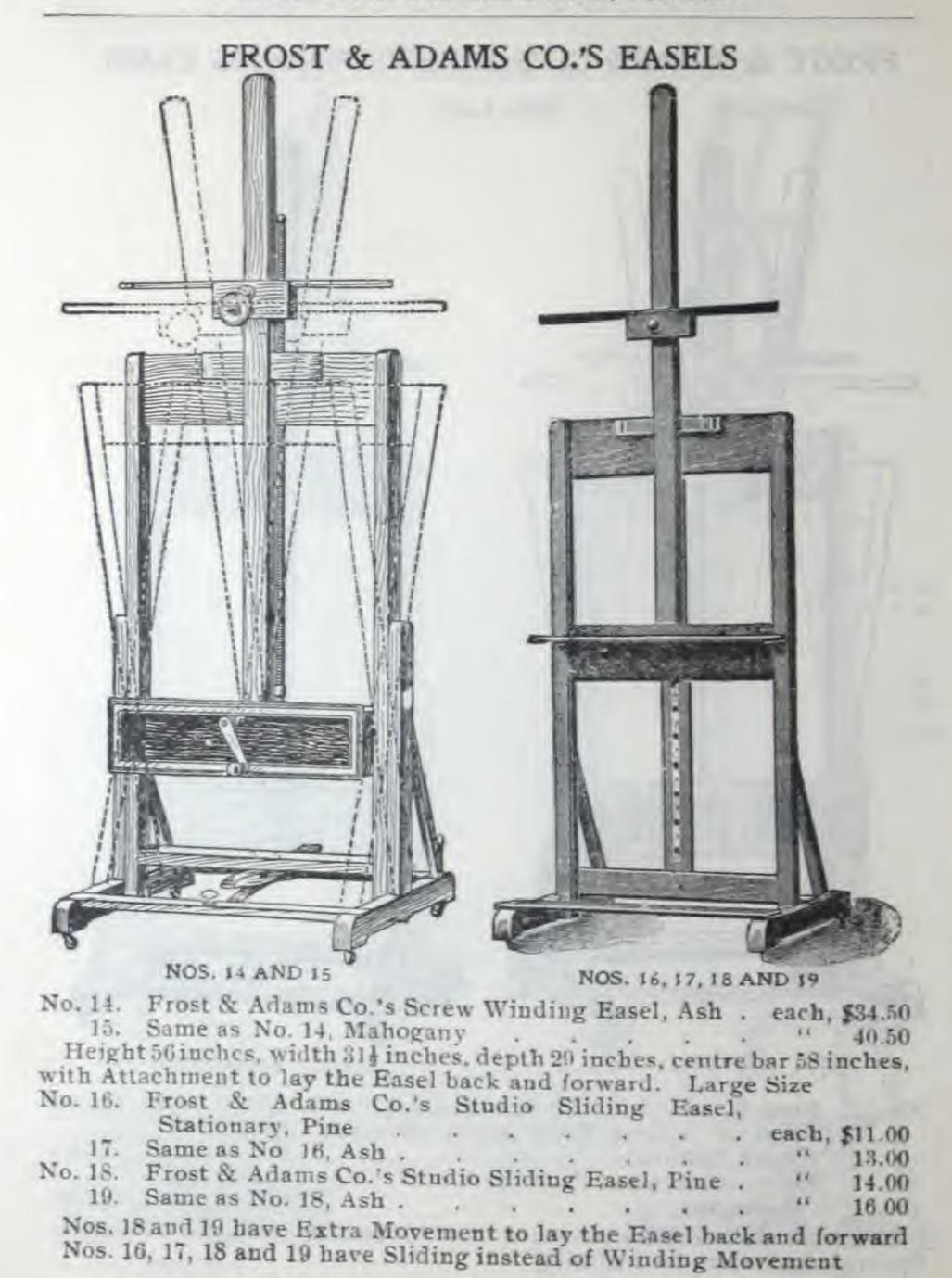
NO. 12

FROST & ADAMS CO.'S SCREW WINDING EASEL

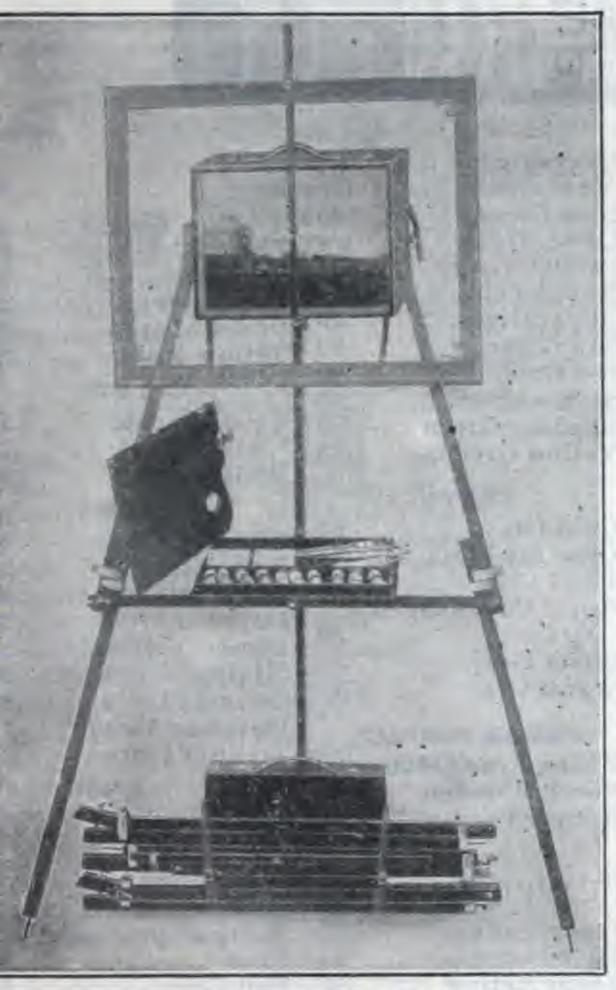
Extra Large



Height 61 inches, width 36 inches, depth 34 inches, centre bar 72 inches. Spring Attachment for inclining



THE SIMPLEX EASEL SKETCH BOX



This outfit is the simplest, most convenient and practical ever made for the painter. In folding, the collapsible legs are laid across rear of box, strapped thereto, thusholding the movable tray in position. Handle is of leather, comfortable securely riveted. and Total weight of outfit including palette and cans, 51/4 lbs. Box holds three panels either horizontal or perpendicular. Tray can be placed upon the cross bars within easy reach, doing away with stooping to the ground for materials, brushes, etc. The palette may be placed upon the tray instead of holding in the hand, which is much preferred by some painters. Box holding panel while painting may be tilted to any angle with ease.

Entire outfit constructed of a light, tough wood - stained and varnished n walnut finish. Fittings, screws, etc., are all of brass, preventing rust

Outfit comple	te wit	h Pa	lette	and	Two	Oil (Cans,	Hole	ling	3 Pai	iels	
10×14	,			1.	100				4			\$8.00
Outfit comple	te wit	h Pa	lette	and	Two	Oil C	ans,	Hold	ling	3 Par	iels	
12×16	-	,					ō				4	10.00

FRY'S VITRIFIABLE COLORS IN POWDER FOR CHINA



er Vial		Per Vial	l and a second	Per Via
-		.20	Ruby	.75
.20		.20	Rose	.20
	The state of the s	.25	REDS	
.30			Blood Red	.25
				.20
				.20
.25				.25
e .20			Yellow Red	.25
	A CONTRACTOR OF THE CONTRACTOR		VIOLETS.	-
.20				400
				.40
or.	Yellow Green	.25		.25
	CRAVS		violet, No. 2	.30
	20 1 4 4 200	20	YELLOWS	
	Laboration of the contract of		Albert Yellow	.25
				.25
		.20	Gray Yellow	.20
.20				.20
			Lemon Yellow	.25
.90			Mixing Yellow	.20
	warm Gray	.23		.20
5 7 7 7 8 1	PINKS & PURP	ES	Primrose Yellow	.15
				.15
	Peach Blossom			
100		321		no
	atoman a di pic	.00	Ivory Glaze	.20
MA	TT OR GOUACI	H COL	ORS	
.20	Ivory Vellum	.201	Pompadour	.20
.20	Lavender	100000000000000000000000000000000000000		-20
.20	Light Yellow			.20
,20	Meadow Gren	700.07		.20
		1000000	Turquoise Blue I.	.20
		100,000	Vellow Brown	.20
.20	Orange Yellow	170000		.20
		.20	AND THE RESERVE OF THE PARTY OF	-20
.20	Purple	.40	0.0000	-20
nples	of above colors		04.5	
*	- HOUTE COIDIS		each.	1.75
	.20 .20 .25 .25 .20 .25 .20 .25 .20 .20 .20 .20 .20 .20 .20 .20 .20 .20	Gray Green Moss Green New Green Olive Green Persian Green Russian Green Russian Green Royal Green Sap Green Sea Green Sea Green Shading Green Yellow Green Yellow Green GRAYS Gold Gray Gray Gray for Flesh Pearl Gray Royal Copenhag Gray Silver Gray Warm Gray PINKS & PURP Palma-Rosa Salm Peach Blossom Roman Purple	State Stat	Gray Green .20 Moss Green .20 New Green .25 Olive Green .20 Persian Green .20 Persian Green .25 Russian Green .25 Royal Green .20 Sap Green .20 Sap Green .20 Sea Green .20 Shading Green .25 Yellow Green .25 Yellow Green .25 Gray for Flesh .25 Pearl Gray .25 Royal Copenhagen .26 Gray Gray for Flesh .25 Pearl Gray .25 Nowled Gray .20 Warm Gray .20 Warm Gray .20 PINKS & PURPLES .20 Palma-Rosa Salmon .20 Peach Blossom .20 Peach Blossom .20 ROYELLOWS .20 Pinks & PURPLES .20 Palma-Rosa Salmon .20 Peach Blossom .20 ROYELLOWS .20 Pinks & PURPLES .25 Royal Purple .20 Pompadour Violet of Iron Vellow Red .25 Wiolet, No. 1 Violet, No. 2 YELLOWS .25 Royal Purple .25 Wising Vellow .25 Gray Vellow Imperial Ivory Lemon Yellow Mixing Vellow Oriental Ivory Primrose Yellow Trenton Ivory .20 Soft Gray .20 Light Yellow .20 Lavender .25 Rose .20 Light Yellow .20 Pompadour .20 Lavender .25 Rose .20 Light Yellow .20 Pompadour .20 Pompadour .20 Trenton Ivory .20 Trenton Ivory .20 Turquoise Blue, D.20 Dive Green .20 Dive Green .20 Purple .40

Any of the above colors can be used for dry dusting, if desired

FRY'S COLORS - Continued Specially Prepared for Miniature and Figure Painting Per Vial Per Vial FRY'S PASTE, ENAMELS, ETC. Per Vial Per Vial Dresden Relief White (Aufsetzweiss) .20 Pink Enamel . . .25 Dresden Flux . . .25 White Enamel . .20 English Enamel . . .20 Turquoise Enamel . .25 FRY'S LIQUID LUSTERS - WHOLE VIALS Per Vial | Per Vial Per Vial Per Half Vial Per Half Vial Per Half Vial Black .40 Gold Lustre .40 Ruby .75 Chatoyant .40 Iridescent Rose .40 Silver .75 Copper .65 Platinum .45 Steel Blue .40 Dark Blue .40 Purple .40 Violet .40 Covering for Gold Lustre, to produce Deep Violet . " .25 FRY'S OILS AND MEDIUMS IN ONE OUNCE BOTTLES AND PINT CANS Bottle Can Can Bottle .20 \$2.50 Fry's Medium \$2.00 .20 Balsam Copaiba 2.00 Fry's Oil for Raised Paste . 20 2.00 .20 Clove Oil 2.00 .20 Fry's Tinting Oil, Special Dresden Thick Oil 3.00 .35 2.00 .20 Lavender Oil English Grounding Oil 2.00 .20 2.00 .20 Tar Oil .25 2.75 Fat Oil Turpentine 2.00 Fry's Enamel Medium .20

Dresden Thick Oil

Fat Oil Turpentine

1/2 oz. bottle, .20 pint can, \$3.00

.15

1/2 11

2.75

FRANZ A. BISCHOFF HIGH GRADE SPECIALTIES

Colors for China, Dry in Powder



	er Vial	Sap Green	Per Vial	100000000000000000000000000000000000000	Per Vial
BLACKS			.25	110000	
Black	.30	Saxony Green	.20	L G HOY	.35
Purple Black	.35	Shading Green	.35	Violet	.35
BLUES		Verdigris	.25		-
		Yellow Green	.30	YELLOWS	
Banding Blue	.25	GRAYS		Albert Yellow	.30
Deck's Blue	.20	Ashes of Roses	50	Dark Yellow	.35
Robin's Egg Blue	.20	Gold Gray	.50	Ivory Yellow	.20
Royal Copenhagen		Neutral Gray	.30	Lemon Yellow	.25
Sevres Blue	.20	White Day	.30	Orange Yellow	.30
BROWNS		White Rose, Gray	***	and acree	.00
Brown Pink	98	for Flowers	.20	GLAZES	
Dark Brown	.25	PINKS & PURPI	ES	Ivory	.20
Finishing Brown	.25	American Beauty		Lavender	20
Hair Brown	.30	Deep Purple	.40	Salmon Pink	.20
Purple Brown	.25	Magenta	.50	Transparent	.20
	.30	Old Rose		Warm Gray	.20
Vandyke Brown	.20	Peach Blossom	.35	Warm Gray	.20
Yellow Brown	.20	Rose	.25	PASTES	
CDDDD		Ruby	.35		- 00
GREENS		Kuby	.75	For Mending Chin	
Brown Green	,20	REDS		For Raised Gold	.20
Celadon	.30	Blood Red	.25	ENAMELS	
Dark Green	.25	Carmine Flesh	.30		00
Dark Moss Green	.30	Carnation			.20
Deep Blue Green	.20	Dragon's Blood	50	Light Blue	.20
Moss Green, A	.20	Flame Red		Lettuce Green	.20
Moss Green, C	.20	Flesh		Pink	.20
Night Green	.20	Pompadour	-20	Turquoise Blue	.20
Olive Green	.20	Popper Pad	.20	Turquoise Green	.20
Russian Green	.20	Control of the Contro		White	.20
2.000		Violet of Iron	.20	Yellow	.20
T 21-2					

Like no other Colors in the market, they are ground in turpentine to secure a fine powder (ready for the dusting-on process) which, when mixed with the oils, will result in a smooth paint. The selection of shades is complete

M. M. MASON'S

OVERGLAZE COLORS FOR PORCELAIN



Pe	r Vial	Pe	er Vial	Pe	r Vial
BLACK		Dark Green	.20	REDS	
Black, best for paint	-	Dark Blue Green	.30	Blood Red	.25
ing and outlining		Empire Green	.25	Carnation	.20
BLUES		Gray Green	.20	Hancock's Carmine	.25
Banding Blue	.25	Moss Green	.20	Peach Blossom	.20
Copenhagen Blue	.25	Myrtle Green	.20	Pompadour	.20
Royal Blue	.75	Olive Green	.25	Rose	.25
Turquoise Blue	.40	Royal Green	.20	Ruby	.80
The same of the sa	.40	Russian Green	.25	Yellow Red	.25
BROWNS	-47	Shading Green	.25	1001 1011	
Dark YellowBrown		Yellow Green	.25	VIOLETS	
Finishing Brown	,25	12220 3133 300 1		Violet	.40
Hair Brown	.25	GRAYS		ALEX Y OFFICE	
Vandyke Brown	.20	Copenhagen Gray	.30	YELLOWS	
Yellow Brown	.20	French Gray	.45	Albert Yellow	.25
GREENS		Pearl Gray	.25	Egg Yellow	.25
Apple Green	.20	Slate Gray	.25	Neutral Vellow	.25
Black Green	.20	Warm Gray	.25	Lemon Yellow	.25
Blue Green	.40	17 11 21 21 21 21		GLAZE	
Brown Green	.20	PINKS & PURPLE	S	Ivory	.25
Celadon Green	.25	THE RESERVE OF THE PROPERTY OF	C-24 (1944)	Flux	.20
Coldina Otton	,	Diona Liaa			
TO SERVICE SHOWING		COD CDOUND IA	VITRIC		
The second second	100	FOR GROUND LA	ATMC	The section of the latest and the la	
English Maroon, Best	.75	Matt Deep Red	.25	Rose for Grounds	.25
Bleachery Blue	,25		.25	Salmon	.20
Grounding Green				Sevres Green	.25
	.25		.30	Trenton Ivory	.20
Matt Bronze Green	.25				
		100	ru I		
- 14 T - 1	FOI	R UNDERGLAZE E	FFE	CTS	
Azure Glaze	.40	Gray Blue Glaze	40	Turanoise Glaze	.30
Green Glaze	.25	Gray Blue Graze	.40	Turquoise Graze	.50
Green Graze	.20	1			
		ENAMELS			
Aufsetzweiss	,25	Hancock's Paste fo	or I	Red Enamel	.30
Dresden Flux	.25	raised gold	.20	MAN THE RESERVE AND THE RESERV	
English Enamel	.20	Pink Enamel	7-5/70/41	White Enamel, Best	.20
CAMPAIN TANKING	120	I was administra		marie samunica, non	+20

D. M. CAMPANA ART CO.'S

RELIABLE MINERAL COLORS



Best Quality, Especially Prepared for Grounding and Painting. In Powder

American Beauty .30 Flesh, shadow .20 Purple Black, good for grapes .1 Apple Green .13 Flesh, soft tint .20 Rose Color, best .1 Ashes of Roses .20 Flesh, transparency .20 Rose Salmon .1 Auburn Brown .13 Flux, soft or hard .13 Royal Blue .3	
Albert Yellow American Beauty Apple Green Ashes of Roses Auburn Brown Albert Yellow American Beauty Albert Yellow American Beauty Albert Yellow Albert Yello	(0)
American Beauty .30 Flesh, shadow .20 Purple Black, good for grapes .1 Apple Green .13 Flesh, soft tint .20 Rose Color, best .1 Ashes of Roses .20 Flesh, transparency .20 Rose Salmon .1 Auburn Brown .13 Flux, soft or hard .13 Royal Blue .3	13
Apple Green .13 Flesh, soft tint .20 Rose Color, best .1 Ashes of Roses .20 Flesh, transparency .20 Rose Salmon .1 Auburn Brown .13 Flux, soft or hard .13 Royal Blue .3	15
Ashes of Roses .20 Flesh, transparency .20 Rose Salmon .13 Auburn Brown .13 Flux, soft or hard .13 Royal Blue .3	15
Auburn Brown .13 Flux, soft or hard .13 Royal Blue .3	15
A contract of the contract of	10.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13
Baby Blue .13 Green Glaze, fordusting .13 Royal Green .1	
Banding Blue .13 Hair Black .20 Royal Purple .3	30
Best Black .13 Hair Brown .13 Ruby Purple, brilliant 4	
Black Blue .13 Imperial Ivory .13 Ruby Purple, No. 2 .3	
Blood Red .20 Ivory Yellow .13 Russian Green .1	13
Blood Red, No. 2 .13 Ivory Glaze, fordusting .13 Sevres Blue	3
Blue Glaze, for dusting .13 Lavender Glaze, for dusting .15 Shading Green 1	3
Brown Green .13 Lemon Vellow, rich .13 Sultan Green, rich .1	3
Carnation .13 Meissen Brown .13 Sweetpea Pink, soft .1	3
Chestnut Brown .13 Moss Green .13 Trenton Ivory 1	3
Copenhagen Blue .13 Myrtle Green .13 Turquoise Blue 1	3
Crimson Purple, best .45 Neutral Yellow .13 Violet Color 9	05
Darkest Green .13 New Green .13 Violet of Iron 9	(0.5
Dark Violet, No. 2 , 13 Olive Green .13 Violet of Iron No. 2 1	3
Deep Blue Green .13 Outlining black .13 Warm Grav 1	3
Deep Red Brown .13 Peach Blossom .20 Water Green, light .1	3
Deep Violet of Gold .35 Peacock Green .13 Vellow Brown .1	
Deep Yellow .13 Pearl Gray .13 Yellow Green .1	3
Egg Yellow 13 Persian Green 13 Vellow Ded o	200
Empire Green .13 Pink Glaze, for dusting .13 Vellow Red. No 2 1	3
Finishing Brown .20 Pompadour Red, light .13	
Finishing Brown, No. 2 .13 Pompadour Red, dark .13	

Per	Vial	Pe	r Vial
Diluting Medium, for outlining Liquid Bright Gold, purest, no thinner	.25	Liquid Bright Gold, purest, no thinner, large Mixing Medium, for mini g colors	.75

D. M. CAMPANA ART CO.'S

RELIABLE LUSTRE COLORS

These Tints are all Desirable and Guaranteed

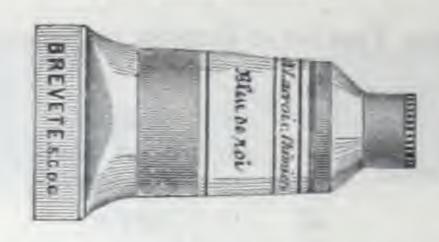
		Net p	er Vial	34 Vial		Net pe	r Vial	1/2 Vial
Black			.40	.25	Orange		12.4	.10
Blue Green.	*		.40	.25	Pearl, Mother of		.20	.12
Blue Gray .			.25	15	Pigeon Gray Pearl		.25	.15
Brilliant Green		41	.25	.15	Purple		.60	.35
Brown	*		,20	.12	Rose		.45	.30
Copper Bronze	2		1.15	.65	Ruby		1.10	
Dark Blue .			.50	.30	Silver Lustre .		.70	.40
Dark Green			.30	.18	Steel Blue		.60	.35
Essence, for thi	nni	ing	.10		Transparent Green		.40	
Gold Lustre			.60	.35	Violet		40	
Green Pearl		1.0	.25	.15	Warm Gray .		.16	.10
Iridescent, stron	ng		.60	.35	White		.16	.10
Light Green			.16	.10	Yellow		.16	
Marble covering			.12		Yellow Brown .		.16	.10
Olive Green	4		.25	.15	Vellow Pearl .		.25	.15
Opal	1	1	.16	.10				,,,,

CHINA MARKING PENCILS

163 BLAISDE	LĻ'S CHINA-MAR	KING PAT.	19.1895	Total So		ju umom	
Black			. pe	er doz., \$	1.25	each	, .10
Blue, Red, Whi	te and Gray		*	16	1.40	11	.15
Encased in	paper, no wood	l, therefo	re easy	o sharp	en.	The	best
pencil for mark	ing on China or	Glass. P	acked in	Boxeso	f 1 de	ozen	
Conte Lithograp	phic Pencils (Bla	ck) in Wo	od, No. 1	per doz	., .90	each	, .10
***	.44	.64.	No. 2	21	.90	44	.10
**	**	10	No. 3	48	.90	.01	.10

LACROIX VITRIFIABLE COLORS IN TUBES

For China Painting



BI	ACK:	S			Light Brown .	7	per tube	22
Brunswick Blac	1-		er tub	4. 75	Light Coffee .			.18
Ivory Black	-	2	it tuo		Otto Brown .		41	.22
Outlining Black			11	.18	Reddish Brown .		45	,22
Raven Black		-	600	,25	Sepia		11.	.22
Ravell black		7		.22	Shammy Brown .		66	.18
B	LUES				Vandyke Brown .		X4	.22
Air Plus			- 11	or-	Yellow Brown .		ix .	.22
Air Blue		2	XI	.25				
Blue No. 29		-	100	.18	CARMIN	ES		
Celestial Blue		*		.25	Carmine No. 2 .	-	- 11	.25
Common Blue	0.		14	.18	Deep Carmine No. 3		30	.30
Dark Blue .		4	411	.18			(46) =	.22
Deep Blue .		16	316	.22	Light Carmine No. 1		-66	.22
Deep Ultramaria	ne		3.6	.30	and an amount and a			
Delft Blue ,		*	110	.18	CARNATI)NS	S	
Indian Blue	-81		4.1	.30	Carnation, D .		11.	.22
Lavender Blue			2.4	.18	Carnation No. 1 .		44	
Light Sky Blue		4	41	.22	Carnation No. 2 .		11	.22
Marine Blue			X a	.30	Carnation No. 2 .			.22
Old Blue .			56	.18	FLUX			
Old Holland Blo	ie		17	.22	Flux		111	40
Sèvres Blue .			00	.30	11112 1 1	+		.18
Sky Blue .			V4-	.22	GREENS			
Turquoise Blue			46	.30	Apple Green .		41	19
Two Fire Blue			5.5		Blue Green, D	*	34	.18
Victoria Blue			0	.18	Blue Green, L .	1	112	
5					Bronze Green	*	(X)	.37
BR	OWNS	5			Brown Green, No. 6	*	47	.30
Black Brown			60	,22	Celadon .			.22
Brown M or 108	*		1.0	.22		100	100	.22
Brown No. 3	-	0.	17		Chrome-Green, 3 B		11	.22
Brown No. 4 or 1	5	140	-61-	.22	Chrome Water-Green	1		.18
Chestnut Brown			er.	.22	Coalport Green, L		4.5	.25
		-	11	.99	Coalport Green, D		med in	.25
Dark Brown	*			,22	Copper Water-Green		**	.18
Deep Red Brown	1		41	.22	Dark Green, No. 7	*	11	.22
Gillyflower .			72	.22	Deep Blue Green		11	.30
Isabella .	4			.18	Deep Chrome-Green	100	AR	.22

Lacroix Colors - continued

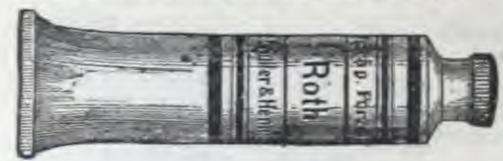
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Always keep tube colors in a cool place, especially during the summer prevent expansion. To prevent forming a deposit and becoming ard, change their position occasionally

MULLER & HENNIG'S

ROYAL DRESDEN CHINA COLORS

In Tubes. For Painting on Glazed China, Tiles, Etc.



BLACKS Brunswick Blk.			No. 10.	Shading Green	per tube	200
Brunswick Blk				Shading Green	her rune	30
	per tube	70	39.	Turquoise Green	11	.60
Outlining Black	11	.30	6.	Yellow Green	11	,30
BLUES				PINKS AND PURPL	ES	
Air Blue .	7.5	.35	No. 21.	Blue Violet	48	.40
Banding Blue		.25	18.	Carmine Purple	-11	.70
Carmine Blue	4.5	.65	19.		- 11	.75
Dark Blue	2.4	.45	20.	Deep Violet	- 0	.75
Delft Blue	44	.25	17.	Rose Purple	11	.45
Light Blue	0	.30	38.	Rose .	188	.40
Turquoise Blue	- 0	.60	54.	Ruby Purple	-64	.75
BROWNS			55,		41	.25
Chestnut Brown	110	.30		REDS		
Chocolate Brown	11	.30	No. 24.	Brown Red	a	,25
Dark Brown	X 0	.25	53.	Carmine	94.	.45
Finishing Brown	7.6	.30	34.	Flesh Red	10	.25
Sepia Brown		.25	23.	Pompadour Red	-0	.25
Yellow Brown	44	.25	44.		10	.35
GRAYS			22.	Yellow Red	44	.25
Flux	er	.25		WHITE		
Gray for Flesh	14	.30	No. 1.	Lb 52 Colored	199	.25
Gray for Flowers	14	.30	1			
GREENS			No. 41.		41	.40
Black Green	- 48	.30	Maria and			.25
Blue Green, D	1.6	.40			121	.25
Blue Green, L	16	.40			41	,25
Brown Green	110	.30			xi.	.25
Dark Green	4.4				10	.25
Grass Green	11.				41	,25
Olive Green	4.0	.30				V AND
	Air Blue Banding Blue Carmine Blue Dark Blue Delft Blue Light Blue Light Blue Turquoise Blue BROWNS Chestnut Brown Chocolate Brown Chocolate Brown Finishing Brown Sepia Brown Yellow Brown GRAVS Flux Gray for Flesh Gray for Flesh Gray for Flowers Blue Green Blue Green, D Blue Green Dark Green Dark Green Chass Green Chocolate Brown Ch	Air Blue Banding Blue Carmine Blue Dark Blue Delft Blue Light Blue Light Blue BROWNS Chestnut Brown Chocolate Brown Chocolate Brown Finishing Brown Finishing Brown Sepia Brown Yellow Brown GRAYS Flux Gray for Flesh Gray for Flesh Gray for Flowers Blue Green Blue Green, D Blue Green Dark Green Chrass Green Chrass Green Chrass Green Chrass Green Chrass Green Chrass Green Chive Green	Air Blue	Air Blue	Air Blue	Air Blue

HALL'S SPECIALTIES FOR CHINA PAINTERS

Hall's Superior Paste, prepared for Raised Gold, ready		
mixed, in ½ oz. glass jars	per jar,	.25
Hall's White Enamel, for Relief Work, opaque, prepared for applying over fired gold or on plain surfaces of china,		
in ½ oz. glass jars	per jar,	.25
color from china, in 1/2 oz. wooden waxed bottles . pe	r bottle,	.25

GOLD, SILVER AND PLATINUM IN LIQUID FORM



MARSCHING'S

Marsching's Superior Liquid Bright
Gold, in packages containing one vial
of Liquid Bright Gold and one vial of
Essence for thinning per doz. pckgs. \$9.00 each, .75
Marsching's Liquid Burnish Gold " 9.00 " .75
" Bright Silver " 10.00 " .90
" 'Platinum' 10.00 " .90

MASON'S

Mason's	Liquid	Bright	Gold perd	oz. vials,	\$6.00	each.	.50
16.	4.6	4.4	Silver	46	5.40	7.6	.45
-11	14	11.	Platinum	1.00	4.20	11	.35

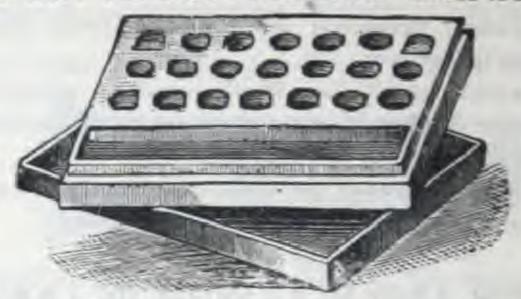
FRY'S

Fry's Liquid I	Bright	Gold	4 1			*		per vial,	.50
(1	1.6	Silver				4		66	.60
16		Platinum			per !	2 via	1, .75	8.6	1.50
Roman Gold		per box,	\$1.00	Red	Gold			per box,	\$1.00
Unfluxed Gold	1 .	**	1.00	Gold	l Bron	ze	4	111	1.00
Green Gold		- 6.6	1.00	Gree	en Gol	d Br	onze	1.6	1.00
Fry's Tracing moulded w	277.7								r, .10
Fry's Graphite	e Tran	sfer Paper	r, mad	e espe	cially:	for p	orcela	ain	
work, size	, 15×2	01/2 inches	S					. per shee	t, .10
Fry's Vitrifiab	le Cen	nent for m	endin	g chin	а.			per via	1, .20
Fry's Gold Es	sence,	1 oz. bott	le		-			, eac	h, .50

GLAZED WHITE CHINA TILES FOR DECORATION

Size	3×	6 in.	per doz.,	\$1.25	each,	.15	Size	8×	8in.	per doz.,	\$6 00	each, \$.5	0
-66	6×	6		2.40	66	.25	16	10×	10	66	12.00	" 1.0	0

CHINA PALETTE FOR MIXING CHINA COLORS



Twenty-one wells with slant and cover

per dozen \$7.20 each, .75

PENCILS FOR DRAWING ON CHINA

Conté Lithographic Pencils	(Black) Nos, 1, 2 and 3		each, .10
Faber's Glass Pencils, Blue,	White and Vellow .		.15

JEWELS

Rubies, Sapphires, Emeralds,						1 to 8	per doze	n, .10
Cut Jewels of the same colors	and	sizes	Nos.	1	to 8	-	-	.20
Cement for Fastening Jewels							4.6	3.00

FRENCH GLASS BRUSHES

Bound With White Cord



No. 1, 8	inches	long,	1/2 inch diameter		- 2	4	2	each, .25
2, 8	91	11	34 11				-	.50
3, 8	4.0	E.0	1 "					.75

Glass brushes are to give fired gold a satin finish, simply by rubbing with the brush. The fine threads of glass break off easily and are apt to irritate the skin unless gloves are worn. Be careful not to allow these fine splinters to settle on unfired paintings as the work will be ruined in firing

SUNDRIES BOOKS

Tried by Fire, with colored plates, by Mrs. Franckleton .	each.	\$6.00
Hand-Book on China Painting, by M. Louise McLaughlin	44	.75
Hand-Book on Pottery Painting, by M. Louise McLaughlin	61	1.00
Suggestions to China Painting	1.6	1.00
Hand-Book on China Painting, by John C. L. Sparks .	3.6	.45
China Painting, by Florence Lewis, with 16 colored plates		2.50
A Guide to Porcelain Painting, by S. T. Whitford	1.5	1.00
Hints for China and Tile Decorators	14	.50
How to apply. Osgood	16	.75

ECLIPSE INDESTRUCTIBLE

CHINA PAINTERS' COMBINATION BOX AND PALETTE



NO. 10

The above illustration shows just what this Palette is. A combination box, to hold thirteen vials or bottles of color, so arranged that you have all your material in the space of $8 \times 13 \frac{1}{2}$ inches, including mixing space. This Palette will at once appeal to all china painters by its simplicity and easily removable slab. The hinged partition on the right side of the Palette can be pressed down, the slab raised with the edge of the guard and removed without a loss or smearing of any one of the colors that may be on it

GOLD ESSENCE

The Roessler & Hasslacher Gold Essence, 1 oz. bottle

each, .25

SPECIALTIES OF THE OSGOOD ART SCHOOL

Standard Pink. Stands repeated firings; the most beauti-	
ful pink ever produced; nothing excels it for roses per vis	1, .40
Standard Jaque Rose. The most delicate pink as well as	
the rich dark "Jaque Rose" effect produced with it . "	1.00
Helland Dold Cross A new groon reproducing Holland	2.00
Holland Delft Green. A new green, reproducing Holland	
Delit Green, the only green entirely satisfactory .	.25
Holland Delft Blue. Finely ground "	.40
Standard Persian Red. For monochrome or solid grounds "	.25
	.40
Standard Violet	
Superior Refler Edulates	.30
Art School Relief Paste (for both china and glass) "	.30
Coalport Green Glaze Color. Finely ground "	.30
Serves Yellow Glaze Color. Finely ground "	.30
Finely Prepared Tinting Oil. (To thin Matt and Glaze	
colors for grounding and painting.) In 1 oz. bottles per doz	., 3.60
Standard Grounding Oil. It simplifies ground-laying with	
powder colors. The process is continuous. The Color	
hand-wast sweet. In 1 on hoteles	9.00
hardens at once. In 1 oz. bottles	3.00
Tar Paste. For removing color from tinted grounds. In	
½ oz. bottles	3.60
"How to Apply." A reliable Guide for beginners and ad-	
vanced students in China Painting. 200 pages, flex-	
ible cloth cover per co	py, .75

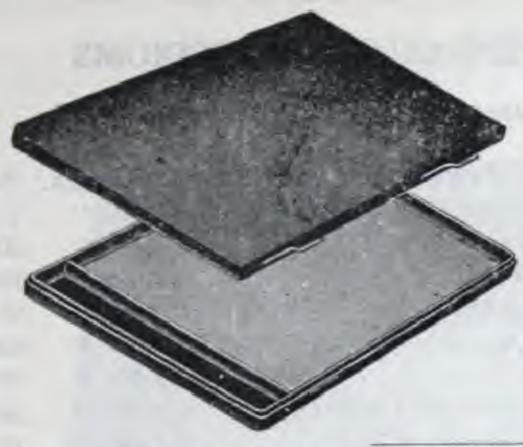
GROUND GLASS SLABS AND GLASS MULLERS

GROU	ND GI	LASS SL	ABS	4	GLASS MU	LLERS	3	
4× 4	in.	each,	\$.10	1/21	n. diam.	each	1, .10	
6× 6	11	1.6	.20	34	11	44	.15	- 0
8× 8	110	11	.40	114	36	.14	25	
10×10	16	1.6	.75	11/2	44	14	.30	125
12×12	11	31	1.00	2	11	44	.35	1
14×14	61	11	1.25	936	17	11	1.25	1
16×16	34	316	1.75	3	ii.	21	1.75	

THE NEW CHINA PAINTER'S PALETTE, NO. 3



No. 3. Palette, 9×13 in.,
with slab, space for
colors and brushes each, \$1.50
Opalglass slabs cut to fit ".50
This Palette is indestructible; one
end can be taken off, the glass slab
removed and another inserted. If
a slab is filled with colors not in use,
or is broken, it can be removed and
a new slab inserted



HASBURG'S

FRY'S IMPROVED COVERED PALETTE

For Mixing Gold or Colors

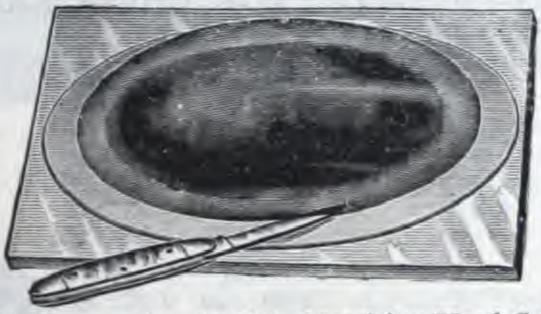
The gold palette consists of a porcelain slab set into a japanned box with brush tray and cover

Size 6× 7 in., (for gold) each, .75
" 9×13" (for colors)" 1.25

GOLD

COOLEY'S PREPARED GOLD ON GLASS SLABS

Brown, No. 6, Gold Bronze each	.\$1.00	Hard or Unfluxed	for overcolo	r each,	\$1.00
Brown, No. 8, Gold Bronze "	1.00	Light Gold .		11	.75
Copper Bronze "	.75	Roman Gold .		11	1.00
Green Gold "	1.00	Roman Gold, larg	e size	44	3.00
Green Gold Bronze . "	1.00	Silver		116	.50



Hall's Roman Gold per bot, \$1.00 | Marching Hard Gold per bot, \$1.00 | Hall's Hard Gold ' 1.00 | Marching Rom. Gold, large ' 3.00 | Hasburg's Roman Gold ' 1.00 | Marching Liquid, bright ' .75 | Marching Roman Gold ' 1.00 | Sherratt Roman Gold ' 1.00

COOLEY'S LIQUID OILS AND MEDIUMS

	For Cl	nina Pain	iting.	One Ounce Bottles	1	2.00
Aniseed Oil		each,	.25	Oil of Lavender	each,	
Balsam Copaiba		11	.25	Oil of Tar	**	.25
Fat Oil of Turpe		66	.25	Rect'd Spirits Turpentine	er.	.15
Grounding Oil		61	.25	Rect'd Spirits of Tar .	4.6	.15
Genuine Dresde	n Thick	Oil "		Tinting Oil	49	.25
Oil of Cloves			.25	and the same of th		

FROST & ADAMS CO'S OILS AND MEDIUMS

For China Painting. One Ounce Bottles



Fat Oil of Turpent	ine	. per	r doz.,	\$2.00	each.	.25
Oil of Lavender			11	2.00	.01	.25
Oil of Cloves .		+	14	3.50	W.	.30
Balsam Copaiba			19	2.00	11	:25
Grounding Oil			14	2.50	**	.25
Aniseed Oil .			116	3.00	3.6	.25
Tinting Oil .			41.	3.00	4.6	.25
Genuine Dresden T	hicl	c Oil	15	3.50	91	.30
Rectified Spirits of	Tar		11	1.50	44	.15
Oil of Tar .			0	2.50	111	.25
Rect'd Spirit of Tu	rpen	tine	46	1.00	44	.10

OILS AND MEDIUMS FOR CHINA PAINTING

LACROIX'S

	Acres 60		20 4	with the	
		Each	Doz. b		
Medium (for Dry colors)	\$2.40		\$1.50	.15	
Rectified Turpentine	1.00	-10			
Rectified Fat Oil, Turpentine	3.75	.35			
Rectified Oil of Lavender .	2.75		1.50		
Rectified Oil of Cloves .	4.50	.40		.25	
DRESDEN					
Thick Oil, 1st quality	4.50	10	0.55	OF.	
	4.50	.40	G. C. P. P.	.25	
Thick Oil, 2d quality	3.50		2.00	.20	
Medium for Dry Colors .	3.50	.30	2.00	.20	
DOMESTIC					
Domestic Fat Oil Turpentine	2.75	.25	1.50	.15	
Extra Balsam Copaiba .	2.75	.25	1.50	.15	
Rectified Spirits of Tar .	1.50	.15			
Oil of Tar	2.75	.25	1.50	.15	
Auiseed Oil	5 50	.50	3.00	.25	
Best English Grounding Oil,					
to dust dry colors on	2.75	.25	1.50	.15	
Tinting Oil, to thin colors for					
light grounds	3.00	.25	2.00	.20	



Essence, to thin Liquid Bright Gold, 20 gram. bottles doz., \$3.00 each, .25

FRY'S CHINA PAINTING OUTFITS



OUTFIT "A"

Polished Wood Box, 34 × 8½ × 1½ inches, containing 12 vials Fry's China Colors, 1 bottle Fry's Medium, 1 Palette Knife, 3 Camel Hair Painting Brushes and 1 Red Sable Lines

1 Red Sable Liner each complete, \$3 50

OUTFIT "B"

Polished Wood Box, 334 × 1016 × 136 inches, containing
15 vials Fry's China Colors (including Ruby), 1
bottle Fry's Medium, 1 Palette Knife, 5 Camel Hair
Painting Brushes and 1 Red Sable Liner , each complete, \$4.50

The colors in the above Outfits are in regular sized vials and can be replaced at catalogue prices. See pages 86 and 87

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EMPTY JAPANNED TIN BOXES FOR CHINA COLORS

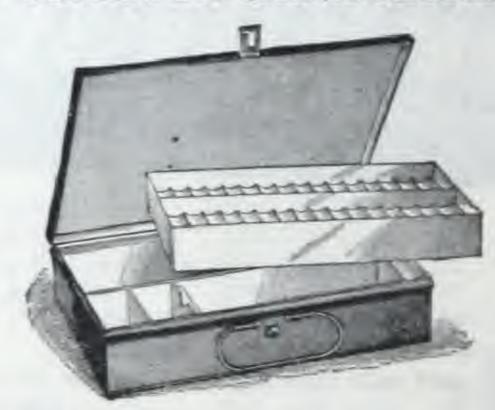


No. 2. Size 10 ×8¼×1% in. 24 divisions . each, \$2.00

4. Size 11¼ ×8 ×1% in.
12 divisions . " 1.50

5. Size 11¼×8 ×15% in.
18 divisions . " 1.75

NEW BOXES FOR CHINA MATERIALS



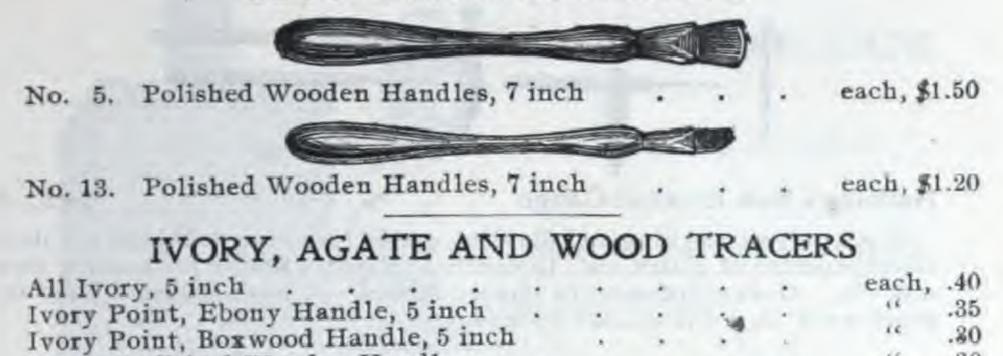
No. 1	VD.	Siz			2×11/2		, 18 d	livisio	ons				each,	\$1.50
13	VD.		7	×11	X 21/2	44	18	8.6		-	-		**	3.00
2	VD.	**	814	× 10	×15%	**	32	4.6					41	2.00
3	VD.	16			8×138	**	40	8.6					3.6	2.50
4	VD.			X 13 1		1.6	44	44					44	3.00
4	VD.	4.6	91/2	×13½	2×2	11	44	11		with Ideal	Pa	lette	44	4.25
1	VD.	**	334	×714	Groun	nd (Glass	Slab	for	No. 1 \	D.	Box	**	.25
2	VD.	1.6		×634	61		4.1	14	14	2	11	5.8	116	.25
3	VD.	6.6	314	×7	6.6		1.6	5.6	11	3	11	11	81	.25

The No. 1½ VD Box is arranged for handled brushes, etc., besides vials or tubes of Color; the only one including the "Special" Ideal Palette

The No. 4VD Box is arranged for handled brushes, etc., besides vials or tubes of Color; accommodates the regular size Ideal Palette. The Ideal Palette furnished with this box has a ring handle in the cover

.30

BLOODSTONE BURNISHERS



ILLUMINATING AGATE BURNISHERS

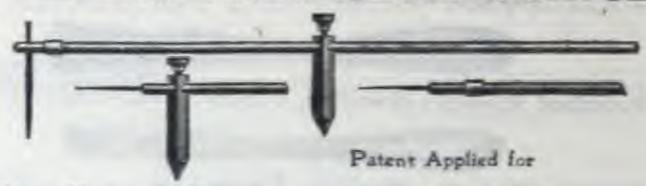


	Extra Small size, Pencil	Point	ed				each,	
2.	Round and Curved .	16			- 11			.55
3.	Flat or Wedged Shape	*		V.				.65
	Flat and Round Pointed		. 1				**	.65

HASBURG'S PERFECT PLATE DIVIDER

Paper Divider, 12 inch diameter, in mailing tube . . each, .10 Divides in 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, etc., parts

HASBURG'S NEW KERAMIC GAUGE



Hasburg's New Keramic Gauge

each, .50

It is a perfect marking and dividing gauge for china and glass painters. Locates centre of plates, etc., instantly. Holds a needle for making stencils, etc. Makes circles up to sixteen inches. Insures accurate, easy and rapid work in conventional designs, etc.

FINEST DRESDEN CHINA MEDALLIONS

Oval Medallions for Decorating

1 ×1 % i	n., N	0. 35	doz.	40	15%×21 i	n. N	0.26	doz	., .90
1-1 × 13%	43	38	51	.50	1%×25	44	23		1.00
13/8 × 13/8	- 64	32	44	.60	2 ×234	14	21		1.10
15 ×15	8.1	31	+ 1		2,1×258	16	17		1.20
136×134	XX	29	8.8		21/2×37	LE	16		1.80
$1\frac{1}{2} \times 1\frac{5}{16}$	-51	28	63		256×356	a	15		3.00

Oblong Medallions for Decorating

34×1	in No.	161	doz.,	.40	214×41/8 i	n., N	0.110	doz.	\$4.80
%×1%	1.6	144			414×5	44	116	11	9.60
1 ×11/4	166	143	er.	.60	4½×6%	44	105	60	14.40
1½×1¾	11	137	77.		636×634	160	101		21.60
14×24	14	124				64	315		28.80

BANDING WHEELS FOR CHINA DECORATORS

No. 1. Banding Wheel, for lining each, \$5.00

Polished metal disc, 61/2 inch diameter, neat iron stand, indented lines for centreing articles



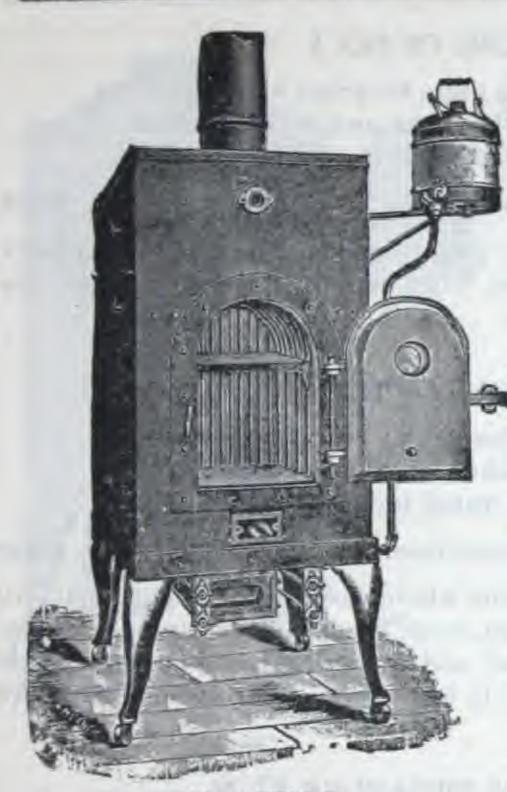
NO. 1

No. 2. Banding Wheel for lining . each, \$13.50

Polished metal disc, 84 inch diameter, turning on steel pivot. Heavy iron floor stand with set screw for adjustment to various heights



NO. 2



CAULKINS' CHINA KILNS

DIMENSIONS OF NO. 4

Inside - 15 inches long, 14 inches high, 9 inches wide

Outside-40 inches high, 21 inches long, 18 inches wide

When crated for shipment it weighs about 450 pounds

NO. 6 STYLE

No. 4 Kiln, includ	ling	tan	k and	l con	necti	on				each,	848.75
Additional muffle			*							11	4.75
Lined Elbows							*	40		1.5	2.50
Lined Pipe .				16	4	-	-3		per	length,	3.00

Without oil tank and connections, if so ordered, \$2.75 less

This is the smallest China Kiln we make. It consumes about one gallon of oil and fires in about one hour and fifteen minutes. It is practical for ordinary studio work, and will receive the 9 inch jardiniere and 131/2 inch punch bowl and tete-tete trays

No. 4 is built to use a fire clay muffle, which may be easily set in or taken out, and the opening filled in with asbestos fibre in accordance with directions

DIMENSIONS OF NO. 5

Inside — 10 inches long, 15 inches high, 10 inches wide Outside — 45 inches high, 25 inches long, and 20 inches wide Weighs about 550 lbs. when crated for shipment

No. 5 Kiln, including tank and connections , , each, \$80.00

This size will admit the 14 inch punch bowls, 21 inch ice creat; trays 14 inch table tops. It fires in one hour and fifteen minutes, and consumes a gallon and a half of oil

DIMENSIONS OF NO. 6

Inside — 21 inches deep; 17 inches high; 14 inches wide Outside — 50 inches high, 25 inches long, 20 inches wide Weighs about 700 pounds when crated for shipment

No. 6 Kiln, including tank and connections . . . each, \$95.00

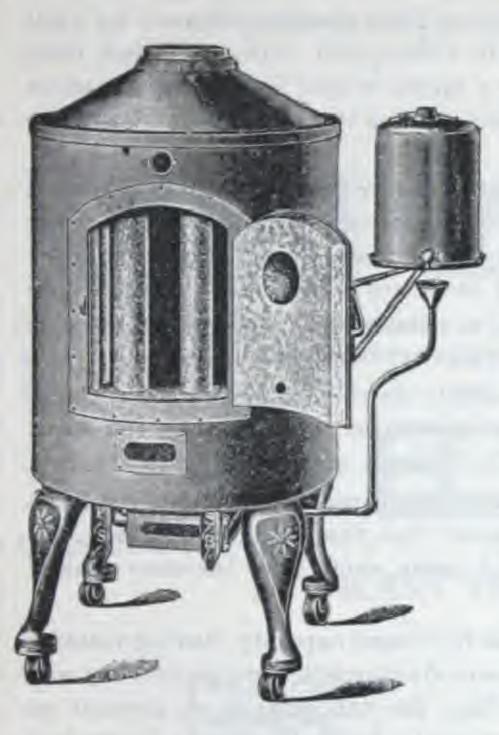
This Kiln is practical for studios where large work is done. It will admit the Beleek tankards upright, with space for a stilt or a ring beneath also the 16 inch punch bowl and a tray 20 inches in diameter, or an ice cream tray 24 inches long. It fires in one hour and one half with two gallons of oil

DIMENSIONS OF MINATURE KILN

This Kiln fires porcelain in about fifteen minutes. It is also used by jewelers and enamelers and can be held at a high heat for ten hours, consuming about 6 gallons of oil or less. The radiation of heat from it is scarcely perceptible

Nos. 5, 6 and 7 Kilns are of tubular construction, so that the lining of the oven is a portion of the construction of the kiln itself. Any of these tubes or different portions being independent parts, may be replaced, without interfering with the rest of the kiln. The kilns are on castors so that it is not difficult to move them, and it is never necessary to life their full weight

Delivered free on board cars. No charge for boxing



CAULKINS' NEW REVELATION KILN

DIMENSIONS OF NO. 3

Inside — 15 inches, diameter, 18 inches high, 47 inches circumference

Outside - 77 inches circumference, 51½ inches high

Weight when crated, about 500 pounds

No. 3 Kiln, including necessary connections, each, \$62.00

It combines the advantages of the round and muffle kilns, together with all the good points of our larger kilns of tubular construction. It will meet the desires of those who prefer to stack in a round oven, yet without having to lift the back-breaking lids of other round kilns, as the ware is stacked through a door in all Revelation Kilns

The new kiln will largely take the place of the No. 4, which, notwithstanding its many friends, has never satisfied us. We have supplied the demand for it, at the same time working to perfect a kiln, similar or somewhat larger in size, which would more nearly approximate our ideas of a perfect kiln. We feel that, with the experience we have had with the tubular construction of the Nos. 5, 6 and 7, we have achieved our object in the No. 3

We shall continue to sell the No. 4 to those who desire it but the advantages of the new No. 3 are so obvious, we are assured that it will give the same unparalleled satisfaction of our other kilns of tubular make

In the first place, the ever-anticipated breakage of the muffle, which is a part of the No. 4, will be obviated. A muffle, being made of one piece

of fire-brick, is bound to give way during the expansion caused by high heat, forming cracks, which enlarge in subsequent firings. It has been impossible for us to foretell whether a muffle would last a long or short period, but, when one gives out, it necessitates the purchase of an entire new muffle

The No. 3 is built on the same plan as our Nos. 5, 6 and 7, with a heavy outer wall of fire-brick and non-conducting material, and an inner tubular lining. This lining, being made of many parts, allows room for expansion without harm, so that it is scarcely necessary to take even repairs into consideration. Yet, when necessary, any separate part, as a single tube or floor plate, may be easily replaced at a slight cost

The removable tubes at the door, which are to be replaced after stacking, form a complete circle of flame about the oven, so that the heat, which is usually reflected at the front, is direct all around in this kiln

Also, from its construction, it has a very direct draught in itself, so that it will require a less perfect chimney flue than the No. 4, which, not having as free an outlet for smoke and gases, sometimes becomes choked in case of a poor draught

Another advantage of the No. 3 is its increased capacity, having interior dimensions which will not only accommodate many more pieces, but will also admit much larger ones, including the tall shapes at present so much in vogue, and, as the oven is unusually high, these may be stacked upright

Instead of the fire-clay plug at the side, as in the No. 4, there is a mica window beneath the door, which gives direct access to the fire chamber, and there is also a window at the top, above the door, through which the flames may be seen

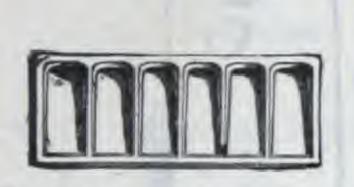
All the other admirable features which have proved practical in our larger Revelation Kilns, have been embraced in the No. 3: — as the square burner, by means of which, for a special purpose, the heat may be thrown or held in any part of the oven at will

The oil can is separate, and to be placed upon a bracket attached to the side of the kiln, and the feed pipe is connected at the factory

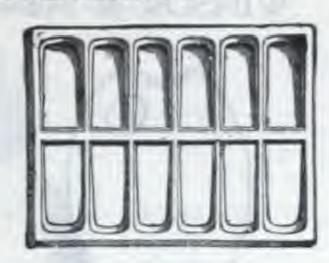
The kiln proper, base and legs, are all built together, and as the whole is upon castors, it is a simple matter to remove the crate and roll into place, without the necessity of lifting its full weight

A firing will consume about the same quantity of kerosene oil as the No. 4— from one and one half to two gallons—and takes from an hour and fifteen minutes to an hour and one half for a firing

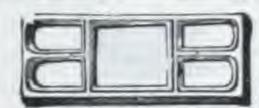
DIVIDED SLANTS AND CENTRE SLANTS







3	Divisions	per doz.,	\$1.55	each,	.20	6	Divisions	per doz.,	\$3.60	each,	.50
4	**	- 11	2.45				**	7.4	5.25		.65
5	**	111	3.15	**	.45	12	61	66	8.40	"	.85

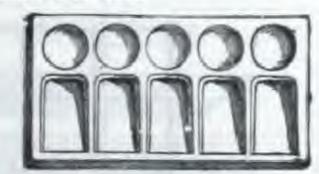


Centre Slant

. . . per doz., \$2.25 each, .35

SLANT WELL SLABS





Box or 3 Well Slabs 5 Well Slabs . . .

each, .30

ROUND SLANT AND BASIN



Basin for Architects' Offices, etc. .

each, \$1.25

INDIA INK AND COLOR SLABS

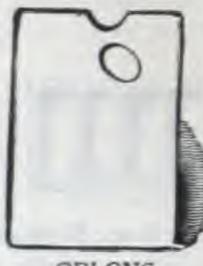


No. 1.	Ink Slab	each, .15	No. 11.	Ink Slab	each, .35
2.	**	" .25	12.	**	" .45

WINSOR & NEWTON'S CHINAWARE, ETC.



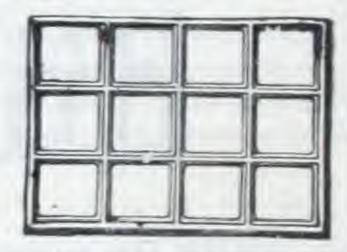
PALETTES



OBLONG

3	inch	Oval or	Oblong	each,	.15	8	inch	Oval o	r Oblong	each	.45
4	4.6	At	.0.	15	-25	9	14	W-(c)	13.	**	.55
5	13	3.3	15	CI.	.30	10	17	4.6	NA.	10	.65
6	4.6	66	41	16	.35	11	10	141	75	34	.80
7	1.0	14	12	44	.40	12	111	10	4.6	-03	95

SQUARE DIVIDED FLAT TILES



3 Squar	e.	4	4.	each,	.30	9.5	Square		0	each,	.65
6 "				+5	.45	12	14			9900	.75

WATER GLASSES



Artists'	Water Glass,	23/8	inch diameter					each,	.15
- 1	**	314	10		,			XX	.25
- 24	58-	334	44					41	.35
	16.6	414	11						.45
Heavy I	Bottom Tumbl	ers	for Architects		per	doze	n. 1.5	0 each.	15

NEST OF CABINET SAUCERS

FIVE CUPS



AND COVER

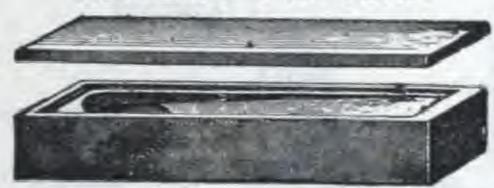
No. 1.	Diameter	23/8	inches,	hight	234	inches	doz.	\$5.40	per set,	.60
2.	1.0	234	11	71	3	44	164	6.60	- (1	.70
3.	- 44	31/2	1.0	16.	334	- 11	**	7.50	44	.80
Extra	Large size				-	-			43	1.00

ROUND TINTING SAUCERS



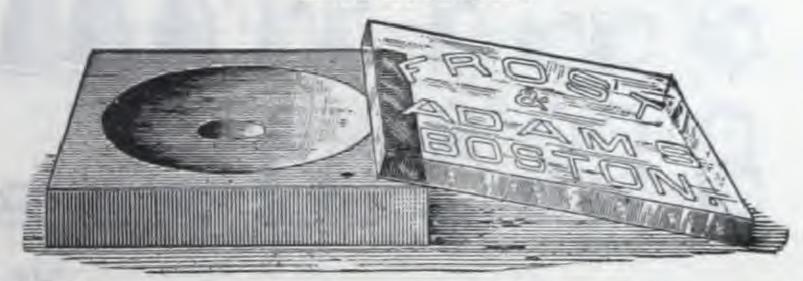
1 i	nch		+		each, 03	21/2 inch			each, .06
11/2	11				.04				.07
2	44	4		*	.05	4 "		4	.08

PATENT INK SLAB



Keuffel & Esser's Patent Ink Slab, 134 × 41/2 inches, with cover each, .50

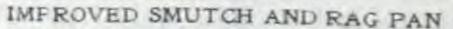
INK SAUCER



Frost & Adams Co's Ink Saucer, square, with glass cover . each, .50 Note.—These Ink Saucers are made of Slate, the surface of which presents just the right grain for grinding the ink smoothly. The cover is of plate glass, ground to a joint

TIN WARE SUNDRIES

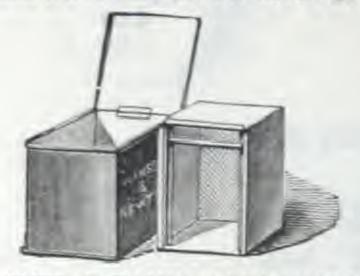






IMPROVED PALETTE CUP

.60





IMPROVED JAPANNED ERUSH CLE.	ANER	JAPA	NNED E	BRUSH	WASHER
Winsor & Newton's Japanned Fl:	at Oil	Bottles,	Screw	Tops	each,

Japanned Flat Oil Bottles, Screw Tops, Thin
Winsor & Newton's Brush Washers
Japanned
Japanned
So
Brush Washers, Ordinary

Brush Washers, Ordinary
with Cover
Winsor & Newton's Improved Brush Cleaners

" .33
" .42

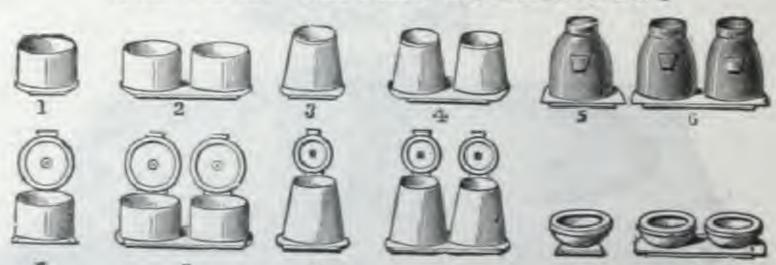
Smutch Pans, 14 inches long

Improved Smutch and Rag Pans, 14 inch

Improved Smutch and Rag Pans, 14 inch

Improved Smutch and Rag Pans, 14 inch

OIL AND WATER COLOR CUPS

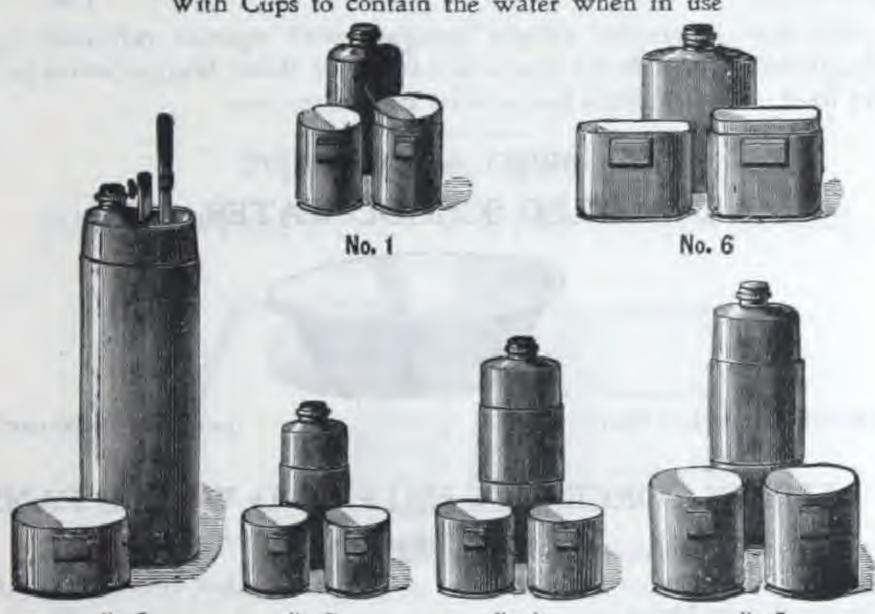


No. 1.	Winsor	& Newton'	s Tin	Pale	tte C	up D	ouble	each,		JAPANNED
3. 4.	Conical	Tin Cups	ouble				TOUBLE	**	.20	.08

		PLAIN	JAPANNED
No. 5.	W. & N. Water Color Cups, with neck for corks, eac	h,	.30
6.	Like No. 5, Double	3	.60
7.	Winsor & Newton's Capped Tin Cups "	.30	
8.	Double "	.60	
9.	Capped Conical Tin Cups		.10
10.	Double		.15
11.	W. & N. Improved Cups, with moveable rims "	.20	.40
12.	Like No. 11, Double "	.40	.80

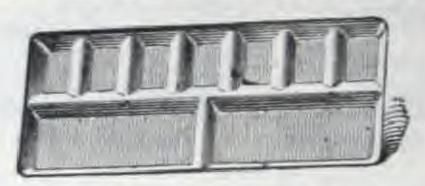
WINSOR & NEWTON'S JAPANNED WATER BOTTLES

With Cups to contain the water when in use



						1
	No. 2	No. 3	No. 4		No. 5	
No. 1.	Round Jap inches	anned Tin Wat	ter Bottle an	d Cups, 31/2		h, \$1.00
2.	Case con	Japanned Ti nplete, 8×2¾ l by elastic l nts	inches; th	he brushe	s be-	2.80
3.	Small Ova	l Japanned T	in Water B	ottle and	Cups	
4.	3¼×1½ Middle Ov	al Japanned T	in Water B	ottle and	Cups,	1.00
	5¼×1¾		. W	into and		1.50
5.	6¼×2 în	I Japanned T	in water i	ottie and	Cups "	1.80
6.	Flat Oval J 334×21/2	apauned Tin 'inches	Water Bottle	and Cups		1.75

FROST & ADAMS CO'S ENAMEL SCHOOL MIXING PALETTES



Our new Improved Palette designed with special reference to the requirements of Schools where our superior Moist Water Colors in tubes are used. This Palette has proved a great success

FROST & ADAMS CO'S ENAMELED SCHOOL WATER CUPS



Round Enameled Water Cups

per dozen, .60 each, .06

EMPTY PORCELAIN HALF AND WHOLE PANS

For School Use

FROST & ADAMS CO'S

HALF PANS SCHOOL WATER COLORS

For Refill for the F. & A. Co's Boxes

	each,	.05	New Green		-	each	.05
	11					11	.05
	14	.05	Sepia			~ 16	.05
*		.05	Vermilion ,	0		in	.05
	16.	05	Vellow Ochre			**	.05
			05	05 Sepia 05 Vermilion .			

Special colors made to order

FROST & ADAMS CO'S

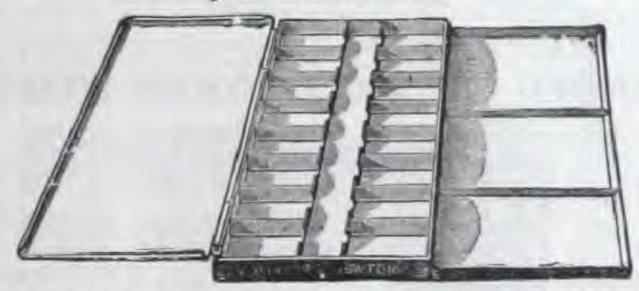
EMPTY WHOLE AND HALF PAN WATER COLOR BOXES

JAPANNED TIN

6	Half Pans			each,	.75	6	Whole or	12 Half	Pans	each	.85
S	4.4	4.		1.0	.85	8	36	16	14	186	1.00
0	44			11.	.95	10	**	20	-0	41	1.15
2	16			44	1.00	12	-66	24	4.6	4.1	1.25
8	18			46	1.25	16	44	32	12	-31	1.35
8	16		14	14	1.30	18	4.6	36	1.5	8.6	1.45
0	14			41	1.35	20	-16	40	1.6	4.8	1.55
1	in.			61	1.50	24	16	48	126	44	1.75

WINSOR & NEWTON'S

EMPTY WHOLE PAN WATER COLOR BOXES JAPANNED TIN



6	Whole or	12	Half Pans	each,	\$1 30	16 W	Thole o	or 32 H	alf Pans	each,	\$2.25
8	14				1.40					6.0	2.40
0	44	20	të	- 11	1.65	20	14	40	8.9	0	2.60
2	ζi.	24		1.6	1.90	24	48	48	14.	+4	3.00

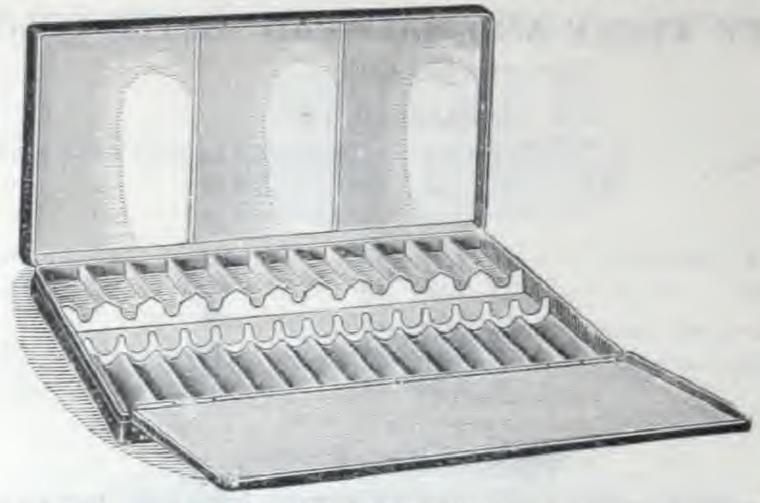
WINSOR & NEWTON'S

EMPTY HALF PAN WATER COLOR BOXES

JAPANNED TIN

o contain	6 H	alf Pans	each	\$1.25	To conta	in 16 H	alf Pans	each	, \$1.90
11	8	**	1.5	1.35	14	18	ci	16	2.00
110	10	**	110	1.45	44	20	8.6	- 66	2.10
	12	16	44	1.55	11	24	**	28	2 30

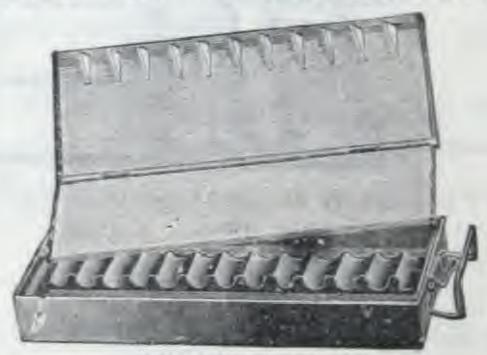
JAPANNED TIN WATER COLOR BOXES



FOR PANS AND TUBES

9	pans and	12	tubes			,.		-	each,	\$1.75
11		15		-	-	-			11.	2.00

JAPANNED TIN WATER COLOR BOXES



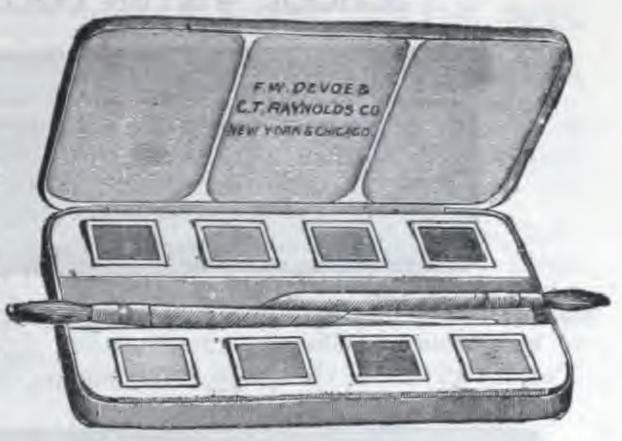
FOR TUBES ONLY

10	divisions,	containing	Folding	Palette		7	(6)			\$1.25
15	11	166	41		*	2	0-		**	1.40
20	1.1	.00	11.			-	4	7	40.	1.50
24	11	.14	-11						44	1.75
30	21	4.6	***		1	4	10		100	1.85
36	**	44	44						61	2.00
00			-25		-	(8)	*	1.0	41	2.25

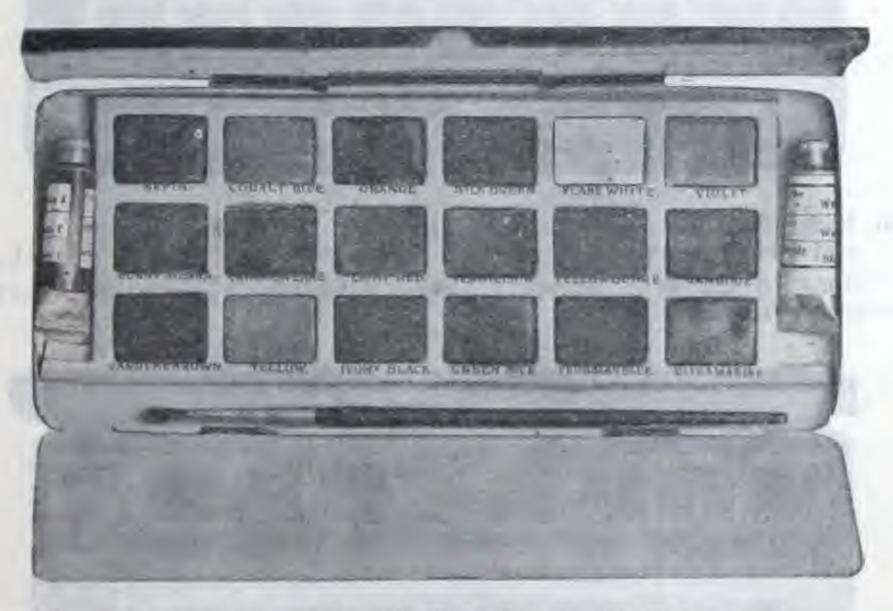
SCHOOL MOIST WATER COLOR BOX

No. 4½X. Box contains
1 Camel Hair Brush,
1 Handle and 8 Half
Pans of Colors ea., .25

Colors: Alizarin Crimson, Gamboge, Cobalt Blue, New Green, Burnt Sienna, G Orange, Violet, Yellow Ochre



VANDYKE WATER COLOR BOX



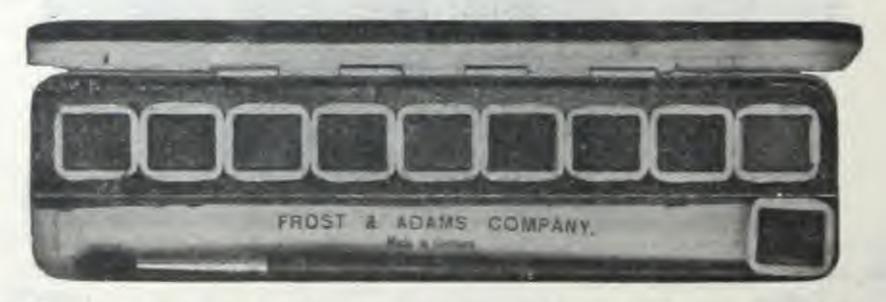
No. 198. Box contains 1 Camel Hair Brush, 18 Colors and 2 Tubes each, .50

Colors: Sepia, Cobalt Blue, Orange, Silk Green, Flake White, Violet, Burnt Sienna, Crimson Lake, Light Red, Vermilion, Yellow Ochre, Gamboge, Vandyke Brown, Yellow, Ivory Black, Green Bice, Prussian Blue, Ultramarine. Tubes, White and Green

FROST & ADAMS CO.'S SCHOOL WATER COLOR BOXES







FROST & ADAMS CO'S

TRANSPARENT, INDELIBLE WATER COLOR BOX



NO. 12

No. 12. Box contains 1 Brush and 12 Round Wooden Pans of Colors

per doz., \$2.00 each, .15

Colors: Black, Brown, Blue, Crimson Lake, Flesh, Green, Magenta, Pink, Purple, Red, White, Yellow

Colors for tinting Photographs, Lantern Slides, Drawings, School Maps, Magazines, Photogravures, Silk, Satin, Leather and Pyrography. Full directions, Harmony of Colors, and rules for mixing or blending, in each box

EXTRA LARGE REMBRANDT WATER COLOR BOX



NO. 43 N/18

No. 43N/18. Box contains 2 Brushes, 18 Pans and 2 Tubes of Colors per doz., \$8.00 each, .75

Colors: Antwerp Blue, Brown Pink, Burnt Sienna, Crimson Lake, Gamboge, Green, Indian Red, Ivory Black, Light Red, Light Yellow, Neutral Tint, Prussian Blue, Prussian Green, Roman Ochre, Sepia, Ultramarine, Vermilion, Yellow Ochre

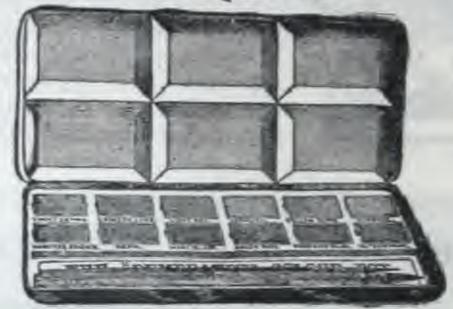
THE SMALL "REMBRANDT" MOIST COLOR BOX

No. 43N/6. Box contains 2 Wells in Cover, for mixing tints, 1 Camel Hair Brush and 6 Pans of Colors per doz., \$3.00 each, .25

Colors: Burnt Sienna, Crimson Lake, Gamboge, Ivory Black, Prussian Blue, Vermilion

THE "REMBRANDT" MOIST WATER COLOR BOXES

FIRST QUALITY

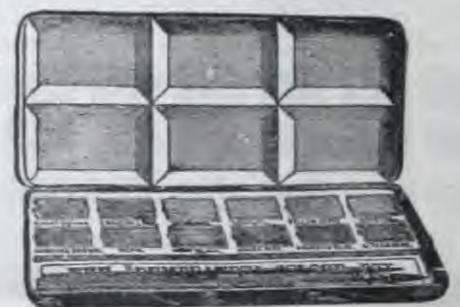


NO. 43N/12

No. 43N/12. Box contains 6 Wells in Cover, for mixing tints, 2 Camel Hair Brushes and 12 Pans of Colors per doz, \$5.00 each .45

Colors: Burnt Sienna, Crimson Lake, Gamboge, Green, Ivory Black, Light Red, Prussian Blue, Sepia, Ultramarine, Vandyke Brown, Vermilion, Yellow Ochre

SECOND QUALITY



NO. 143/12

No. 143/12. Box contains 6 Wells in Cover, for mixing tints, 1 Camel Hair Brush and 12 Pans of Colors per doz., \$4.00 each, .25

Colors; Burnt Sienna, Crimson Lake, Gamboge, Green Bice, Ivory Black, Light Red, Prussian Blue, Sepia, Ultramarine, Vandyke Brown, Vermilion, Yellow Ochre

THE "MURILLO" MOIST WATER COLOR BOXES

SMALL FRENCH

No. 473. Box contains 6 Wells in Cover for mixing tints, 3 Camel Hair Brushes, 1 Tube Chinese White, 1 Tube Sepia and 12 Pans of Colors . . . per doz., \$7.50 each, .75

Colors: Burnt Sienna, Cobalt, Carmine, Emerald Green, Gamboge, Indian Yellow, Ivory Black, Light Red, Prussian Blue, Vandyke Brown, Vermilion, Yellow Ochre

LARGE FRENCH

No. 474. Box contains 6 Wells in Cover and 1 flap Palette for mixing tints, 4 Camel Hair Brushes, 1 Tube Chinese White, 1 Tube Sepia and 16 Pans of Colors per doz., \$11.00 each, \$1.00 Colors: Burnt Sienna, Carmine, Cobalt, Emerald Green, Gamboge, Indian Yellow, Indigo, Ivory Black, Light Red, Madder Brown, Pale Chrome, Prussian Blue, Ultramarine, Vandyke Brown, Vermilion, Yellow Ochre

FRENCH

NO. 474



No. 43M/12. Box contains 6 Wells in Cover for mixing tints,
3 Camel Hair Brushes, 1 Tube Chinese White, 1 Tube
Sepia and 12 Pans of Colors . . . per doz., \$6.50 each, .60
Colors: Burnt Sienna, Cobalt, Carmine Emerald Green, Gamboge,
Indian Yellow, Ivory Black, Light Red, Prussian Blue, Vandyke Brown,
Vermilion, Yellow Ochre

LARGE GERMAN

No. 43M/16. Box contains 6 Wells in Cover and 1 flap Palette for mixing tints, 4 Camel Hair Brushes, 1 Tube of Chinese White, 1 Tube Sepia and 16 pans of colors per doz., \$9.50 each, .90 Colors: Burnt Sienna, Carmine, Cobalt, Emerald Green, Gamboge, Indian Vellow, Indigo, Ivory Black, Light Red, Madder Brown, Pale Chrome, Prussian Blue, Ultramarine, Vandyke Brown, Vermilion, Yellow Ochre

FROST & ADAMS CO'S STUDENTS' WATER COLOR BOX



No. 52B. Box contains 2 Camel Hair Brushes and 8 Half Pans of Colors each, .85

Colors: Burnt Sienna, Crimson Lake, Gamboge, Prussian Blue, Sap Green, Sepia, Vermilion, Yellow Ochre

GEORGE ROWNEY & COMPANY'S STUDENTS' MOIST WATER COLOR BOX



Colors: Burnt Sienna, Chrome Yellow, Cobalt Blue, Crimson Lake, Emerald Green, Gamboge, Light Red, Prussian Blue, Ultramarine, Vandyke Brown, Vermilion, Yellow Ochre

THE "THREE COLOR" SCHOOL OUTFIT WATER COLOR BOX



Three colors only, Carmine, Mineral Vellow, Ultramarine Blue

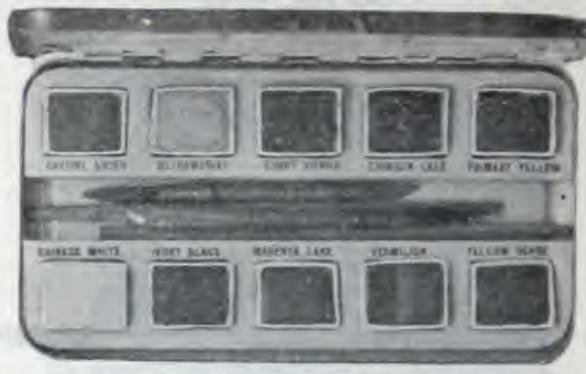
The "Three Color" School Outfit of Water Colors is the best that can be devised for school work. Teachers of modern ideas prefer to teach their pupils to produce colors by the careful admixture of primary shades, rather than have all colors provided

In the "Three Color" Box will be found three colors of extra strength viz.: Carmine, Mineral Vellow and Ultramarine Blue. From these three primary colors, others are produced by mixing. Two cakes of Vellow are provided to one each of the Blue and Carmine, more Yellow being used in mixing than either of the others

The inside of the box cover is intended to be used as a palette. Two extra quality brushes and handles are included in each box. The "Three Color" Box is the ideal outfit of Water Colors for all grades of school instruction

ILLUSTRATORS' VEST POCKET WATER COLOR BOX

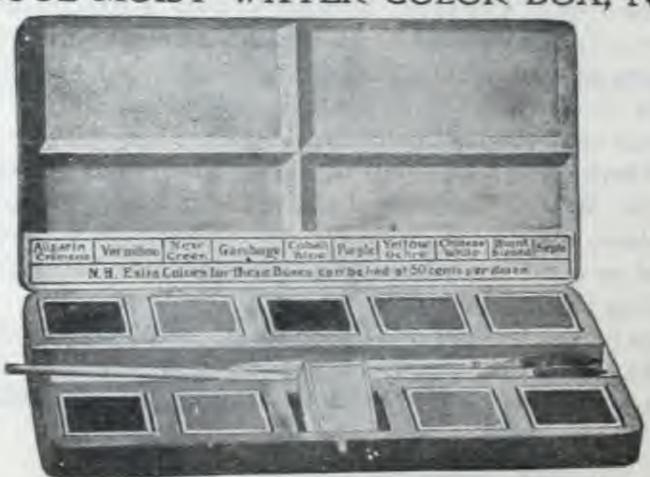
FROST & ADAMS CO.'S VALAZQUEZ BOX



Colors: Chrome Green, Ultramarine, Burnt Sienna, Crimson Lake, Primary Yellow, Chinese White, Ivory Black, Magenta Lake, Vermilion, Yellow Ochre

High grade French Box Colors equal to Winsor & Newton's

SCHOOL MOIST WATER COLOR BOX, NO. 2



Box No. 2. Contains the following: Alizarin Crimson, Burnt Sienna, Chinese White, Cobalt Blue, Gamboge, New Green, Purple, Sepia, Yellow Ochre; 2 fine Camel Hair Pointed Quill Brushes, with Pencil Stick each, .60 Extra Colors for these Boxes per dozen, .50

This grade of Water Color Boxes we manufacture specially for School use. Also used largely by Amateurs. For sale by all dealers in Artists' Materials and Stationery Goods

FROST & ADAMS CO'S

NO. 3, SPECIAL ENGLISH MOIST WATER COLOR BOX

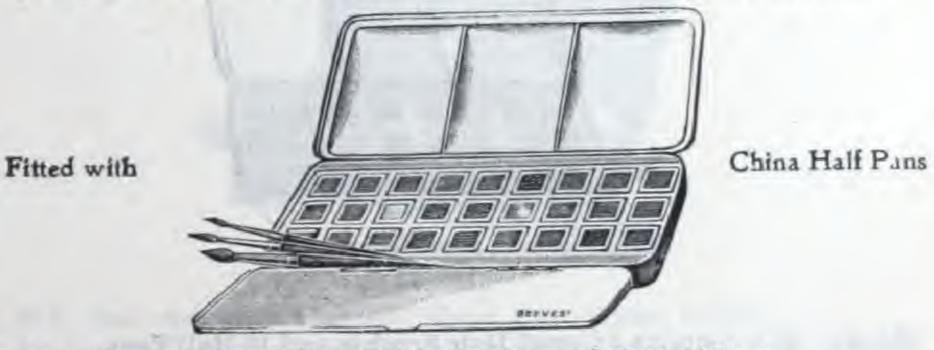


No. 3. Box contains 2 Camel Hair Quill Brushes, with handles and 10 Half Pans of Colors each, \$1.00

Colors: Burnt Sienna, Chinese White, Crimson Lake, Indian Yellow, Ivory Black, Mauve, Permanent Blue, Rose Madder, Sap Green, Vermilion

NEW ENGLISH

JAPANNED TIN MOIST WATER COLOR BOXES

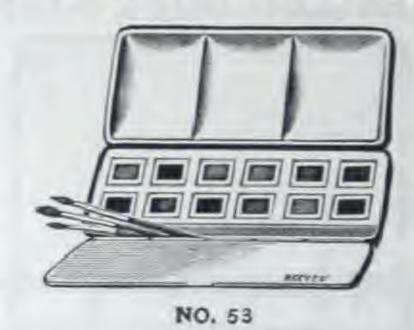


No. 55. Box contains 3 Camel Hair Brushes and 27 Half Pans of Colors each, \$2.25

Colors: Brown Madder, Burnt Sienna, Burnt Umber, Carmine, Chinese White, Chrome Yellow, Deep; Chrome Yellow, Pale; Cobalt Blue, Crimson Lake, Emerald Green, Gamboge, Green Bice, Hooker's Green, Ivory Black, Light Red, Mauve, Olive Green, Prussian Blue, Raw Sienna, Rose Madder, Sap Green, Scarlet Lake, Sepia, Ultramarine Blue, Vandyke Brown, Vermilion, Yellow Ochre

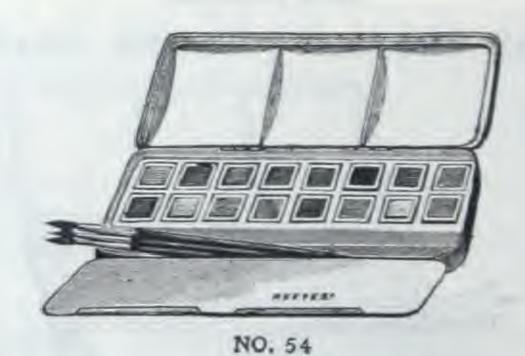
These Colors are suitable for Artists, Students and Amateurs. The Colors in these Boxes can be replaced with Frost & Adams' or Winsor & Newton's Half Pans

New English Japanned Tin Moist Water Color Boxes-contin'd



No. 53. Box contains 3 Camel Hair Brushes and 12 Half Pans of Colors each, \$1.00

Colors: Burnt Sienna, Chrome Yellow, Pale; Crimson Lake, Gamboge, Green Bice, Light Red, Prussian Blue, Sepia, Ultramarine Blue, Vandyke Brown, Vermilion, Yellow Ochre



No. 54. Box contains 3 Camel Hair Brushes and 16 Half Pans of Colors each, \$1.50

Colors: Brown Madder, Burnt Sienna, Chinese White, Chrome Yellow, Pale; Cobalt, Blue, Crimson Lake, Gamboge, Green Bice, Light Red, Olive Green, Prussian Blue, Sepia, Ultramarine Blue, Vandyke Brown, Vermilion, Yellow Ochre

These Colors are suitable for Artists, Students and Amateurs. The Colors in these Boxes can be replaced with Frost & Adams' or Winsor & Newton's Half Pans

New English Japanned Tin Moist Water Color Boxes-Contin'd



No. 60. Box contains 3 Brushes, 5 China Saucers and 8 Half
Pans of Colors each, \$1.00

Colors: Crimson Lake, Gamboge, Green Bice, Ivory Black, Prussian Blue, Ultramarine, Vermilion, Yellow Ochre



NO. 61A

No. 61A. Box contains Japanned Water Cup, China Palette
3 Camel Hair Brushes and 20 Half Pans of Colors each, \$3.00

Colors: Brown Madder, Burnt Sienna, Chinese White, Chrome Orange, Chrome Yellow, Pale; Cobalt Blue, Crimson Lake, Gamboge, Green Bice, Hooker's Green, Ivory Black, Light Red, Mauve, Olive Green, Prussian Blue, Scarlet Lake, Ultramarine, Vandyke Brown, Vermilion, Yellow Ochre

The colors in these boxes are the best Students' or School Colors on the market, the Brushes are of excellent Camel Hair, the boxes are well finished and very durable

New English Japanned Tin Moist Water Color Boxes-contin'd



NO. 61

No. 61. Box contains Japanned Water Cup, China Palette, 3 Camel Hair Brushes and 14 Half Pans of Colors . each, \$2.00

Colors: Brown Madder, Burnt Sienna, Chrome, Pale; Crimson Lake, Gamboge, Green Bice, Ivory Black, Light Red, Olive Green, Prussiar Blue, Ultramarine Blue, Vandyke Brown, Vermilion, Vellow Ochre



NO. 62

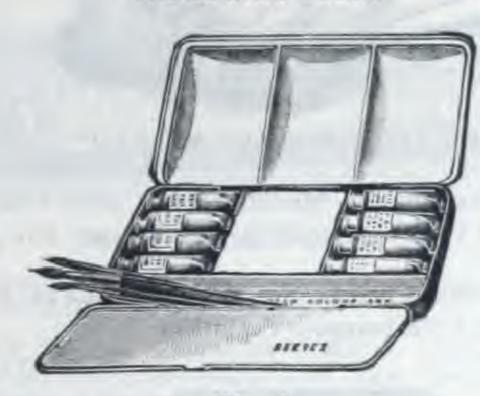
Colors: Brown Madder, Burnt Sienna, Burnt Umber, Carmine, Chrome, Deep; Chrome Orange, Chrome, Pale; Cobalt Blue, Crimson Lake, Emerald Green, Gamboge, Green Bice, Hooker's Green, Deep; Ivory Black, Light Red, Mauve, Olive Green, Prussian Blue, Raw Sienna, Rose Madder, Sap Green, Scarlet Lake, Sepia, Ultramarine Blue, Vandyke Brown, Vermilion, Yellow Ochre

These Colors are suitable for Artists, Students and Amsteurs. The Colors in these Boxes can be replaced with Frost & Adams' or Winsor & Newton's Half Pans

FROST & ADAMS CO'S

STUDENTS' JAPANNED TIN, TUBE MOIST WATER COLOR BOXES

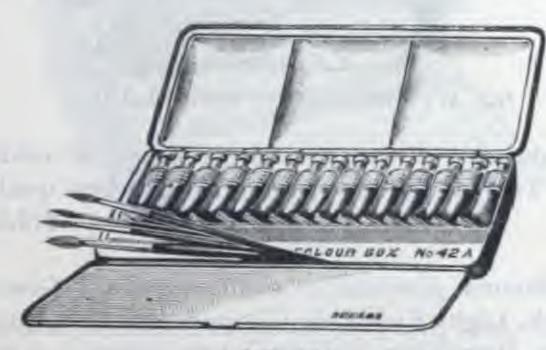
THREE INCH TUBES



NO. 42

No. 42. Box contains 2 Camel Hair Brushes and 8 Tubes of Colors, 3 inches long each, \$1.50

Colors: Burnt Sienna, Crimson Lake, Gamboge, Green Bice, Prussian Blue, Sepia, Ultramarine Blue, Vellow Ochre

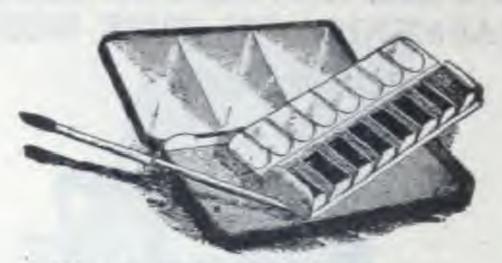


NO. 42A

No. 42A. Box contains 3 Camel Hair Brushes and 12 Tubes of Colors, 3 inches long each, \$2.00

Colors: Burnt Sienna, Chrome Yellow, Crimson Lake, Gamboge, Green Bice, Light Red, Prussian Blue, Sepia, Ultramarine Blue, Vandyke Brown, Vermilion, Yellow Ochre

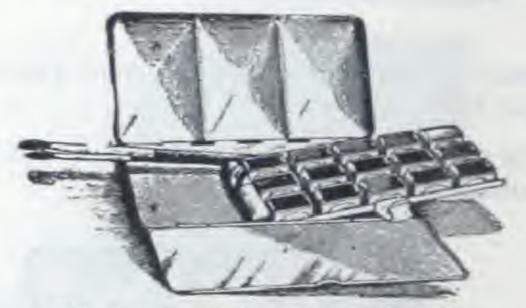
FRENCH MOIST WATER COLOR BOXES



NO. 476 IMPROVED "MURILLO"

No. 476. Box contains 1 Brush, Movable Tray, with mixing spaces, holding 8 Pans best quality Colors per doz., \$7.50 each, .75

Colors: Burnt Sienna, Chrome No. 1, Crimson Lake, Emerald Green, Prussian Blue, Sepia, Ultramarine, Vermilion



NO. 477 IMPROVED "MURILLO"

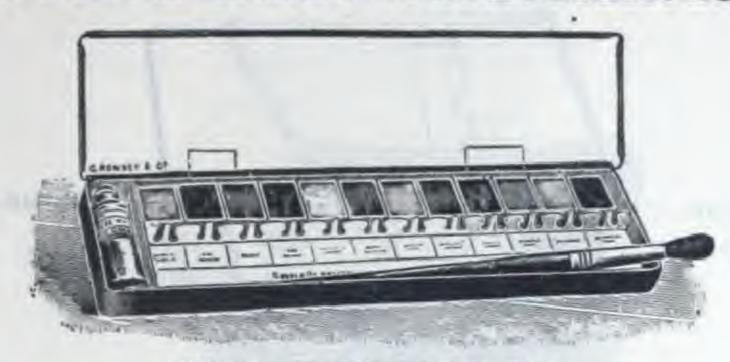
No. 477. Box contains 2 Brushes, Palette Flap, Movable
Tray, holding Tube of Chinese White, 15 Pans best quality Colors per doz., \$13.50 each, \$1.25

Colors: Burnt Sienna, Carmine, Cobalt, Emerald Green, Gamboge, Indigo, Ivory Black, Light Red, Pale Chrome, Prussian Blue, Sap Green, Sepia, Ultramarine, Vermilion, Yellow Ochre

SEPARATE COLORS FOR BOXES NOS. 476 AND 467

Cobalt and Carmine				9		*	per doz.	\$1.80	each	.20
All other colors	4	4	4				44	1.20	-51	.15
Chinese White in tu	bes	(for	No.	477	boxes)	+	14.6	1.20	24	.15

GEO. ROWNEY'S MOIST WATER COLOR BOXES



NO. 36. SCHOOL BOARD BOX

No. 36. Box contains 1 Camel Hair Brush No. 5, 1 tube Chinese White and 12 Half Pans of Colors each, \$1.50

Colors: Burnt Sienna, Cadmium Vellow, Cobalt, Crimson Lake, Indian Red, Madder Lake, Prussian Blue, Raw Sienna, Sap Green, Vermilion, Warm Sepia, Yellow Ochre



NO. 41. THE DIANA BOX

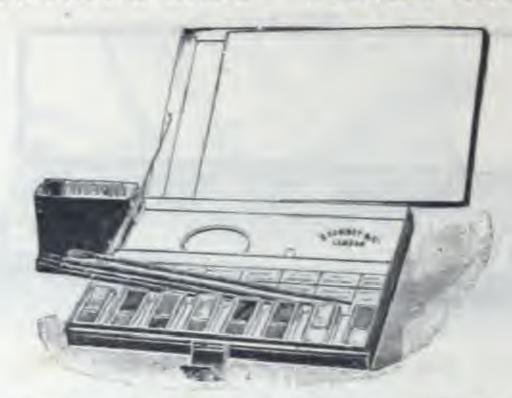
No. 41. Box contains 1 Camel Hair Wash Brush, ¾ in.; 5 Camel Hair Brushes assorted 1 to 6, 1 Tube each Chinese White, Cobalt, Light Red, Sepia and 30 Half Pans of Colors . each, \$4.00

Colors: Antwerp Blue, Burnt Sienna, Burnt Umber, Carmine, Chrome Orange, Chrome No. 1, Chrome No. 2, Crimson Lake, Emerald Green, French Ultramarine, Gamboge, Green Bice, Hooker's Green, Indian Red, Indigo, Ivory Black, Lemon Yellow, Madder Brown, Mauve, Naples Yellow, Neutral Tint, Prussian Blue, Purple, Raw Sienna, Raw Umber, Rose Madder, Sap Green, Vandyke Brown, Vermilion, Yellow Ochre

NO. 30

NO. 29

GEO. ROWNEY'S MOIST WATER COLOR BOX



THUMB-HOLE

GEO. ROWNEY'S MOIST WATER COLOR BOX



THUMB-HOLE

No. 29. Contains 14 Half Pans, 4 Brushes . . . each, \$2.00

Colors: Burnt Sienna, Chrome Yellow No. 2, Chrome Yellow No. 3, Crimson Lake, Emerald Green, French Ultramarine Blue, Gamboge, Light Red, Prussian Blue, Sap Green, Sepia, Vandyke Brown, Vermilion, Yellow Ochre

GEO. ROWNEY'S MOIST WATER COLOR BOX

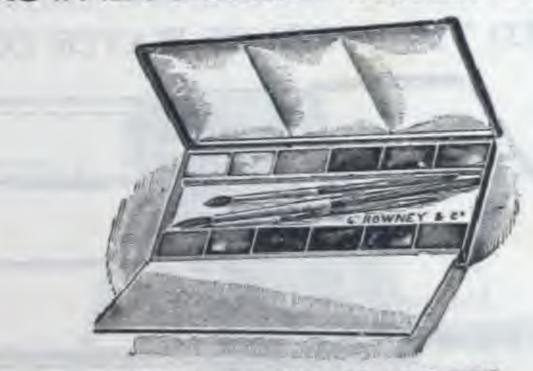


NEW PATTERN

No. 29. Contains 21 Half Pans, 4 Camel Hair Brushes, . . each, \$2.25

Colors: Brown Madder, Burnt Sienna, Carmine, Chrome Orange, Cobalt Blue, Crimson Lake, Gamboge, Green Bice, Hooker's Green, Ivory Black, Light Red, Mauve, Olive Green, Pale Chrome, Prussian Blue, Scarlet Lake, Ultramarine, Vandyke Brown, Vermilion, Yellow Ochre

GEO. ROWNEY'S MOIST WATER COLOR BOX



NO. 27. SCHOOL OF ART BOX

Colors: Burnt Sienna, Chrome Yellow, Crimson Lake, Emerald Green, Gamboge, Light Red, Prussian Blue, Sepia, Ultramarine, Vandyke Brown, Vermilion, Yellow Ochre

GEO. ROWNEY'S "ADVANCED STUDENT'S" BOX

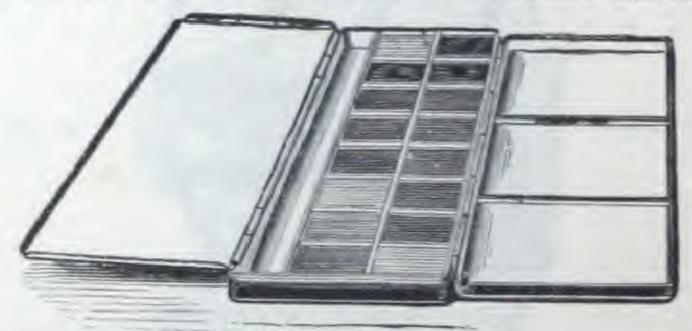


NO. 31

No. 31. Contains 25 Half Pans, large Tubes of Chinese White and Sepia and 4 Camel Hair Brushes, complete . . . each, \$3.00

Colors: Brown Madder, Burnt Sienna, Chrome Green, Chrome Yellow, L., M. and D.; Cobalt, Crimson Lake, Emerald Green, Gamboge, Indigo, Lamp Black, Light Red, Naples Yellow, Prussian Blue, Purple, Raw Sienna, Raw Umber, Rose Madder, Sap Green, Scarlet Lake, Ult, Blue, Vandyke Brown, Vermilion and Yellow Ochre

WINSOR & NEWTON'S JAPANNED TIN BOXES OF WATER COLORS



WHOLE PAN BOX

Winsor & Newton's Fitted Boxes - continued

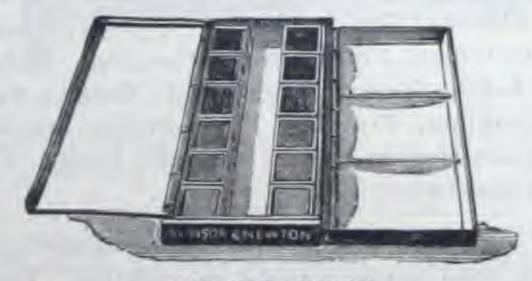
8 Pan Box contains Burnt Sienna, Cobalt, Crimson Lake, Gamboge, Indigo, Light Red, Vandyke Brown and		
	each,	3.90
10 Pan Box contains Aureolin (1/2), Brown Pink, Burnt		
Sienna, Cobalt, Crimson Lake, Gamboge, Indigo, Light		1 44
Red, Raw Sienna (1/2), Vandyke Brown and Yellow Ochre	each,	4.95
12 Pan Box contains Aureolin (1/2), Brown Pink, Burnt		
Sienna, Cobalt, Crimson Lake, Gamboge, Indigo, Indian		
Red (1/2), Light Red, Neutral Tint, Raw Sienna (1/2),		
Vandyke Brown, Vermilion (1/2) and Yellow Ochre .	each,	5.50
16 Pan Box contains Aureolin (1/2), Brown Madder, Brown		
Pink, Burnt Sienna, Cadmium Vellow (1/2), Cobalt,		
Crimson Lake, Emerald Green (1/2), Gamboge, Indian		
Red (1/2), Indigo, Lemon Vellow (1/2,) Light Red, Neutral		
Tint, Raw Sienna (1/2), Rose Madder, Vandyke Brown,	nank	0.00
Vermilion (1/2), Viridian (1/2) and Yellow Ochre	eacn,	8.90
18 Pan Box contains Aureolin (1/2), Brown Madder, Brown		
Pink, Burnt Sienna, Cadmium Yellow (1/2), Cobalt,		
Crimson Lake, Emerald Green (1/2), Gamboge, Indian		
Red (1/2), Indigo, Lemon Yellow (1/2), Light Red, Neutral Tint, Purple Lake, Raw Sienna (1/2), Rose Madder, Sepia,		
Tint, Furple Lake, Raw Sienna (/2), Rose Madder, Sepia,		

WINSOR & NEWTON'S

Yellow Ochre . .

JAPANNED TIN BOXES OF WATER COLORS

Vandyke Brown, Vermilion (1/2), Viridian (1/2) and



HALF PAN BOX

6 Half Pan Box contains Crimson Lake, Gamboge, Light Red, Prussian Blue, Vandyke Brown, and Yellow Ochre each, \$2.10

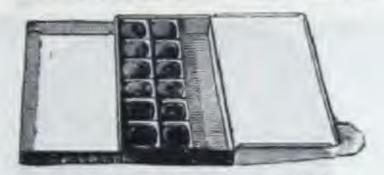
Winsor & Newton's Fitted Boxes - continued

Box contains Burnt Sienna, Cobalt, Crimson Gamboge, Indigo, Light Red, Vandyke Brown and Ochre each, \$2.60
n Box contains Brown Pink, Burnt Sienna, Cobalt, on Lake, Gamboge, Indigo, Light Red, Raw Vandyke Brown and Yellow Ochre each, 3.00
n Box contains Brown Madder, Brown Pink, Sienna, Cobalt, Crimson Lake, Gamboge, Indigo, Red, Raw Sienna, Vandyke Brown, Vermilion and
Ochre Box contains Aureolin, Brown Madder, Brown Burnt Sienna, Cadmium Yellow, Cobalt, Crimson Bamboge, Indian Red, Indigo, Light Red, Neutral aw Sienna, Vandyke Brown, Vermilion and Yellow
Box contains Aureolin, Brown Madder, Brown Burnt Sienna, Cadmium Vellow, Cobalt, Crimson Emerald Green, Gamboge, Indian Red, Indigo, Red, Neutral Tint, Raw Sienna, Rose Madder,
n Box contains Aureolin, Brown Madder, Brown Burnt Sienna, Cadmium Yellow, Cobalt, Crimson Emerald Green, French Blue, Gamboge, Indian digo, Light Red, Neutral Tint, Oxide of Chromaw Sienna, Rose Madder, Vandyke Brown, Veraud Yellow Ochre
and Vellow Ochre
and Yellow Ochre each, 8.55

These Boxes are light and strong, with covers whose inner surfaces are enamelled with a dead white serving as palettes. The selections of Moist Colors placed in them have been made with much care, and after due study of the various lists of the first Water Color Artists

WINSOR & NEWTON'S

BOXES OF MOIST WATER COLORS



QUARTER CAKE BOX

Box with	601	arter Cakes	ench,	\$1.50	Box wi	th 16 Qu	arter Cak	es each,	\$3.50
11	8	14	a.E	2.00	11	18	6.4	16	3.75
4.6	10	**	-(1	2.20	16	20	4.6	1.1	4.00
4.4	12	8.1	1.6	2.50	16	24	44	4.6	5.00
44	14	**		3.00	14	30	4.6	**	6.50

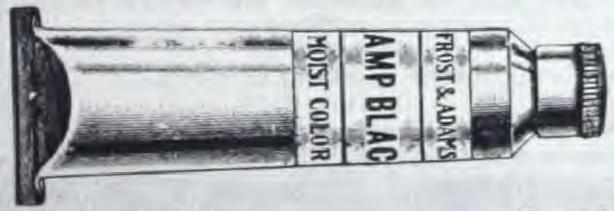
WINSOR & NEWTON'S

JAPANNED TIN EMPTY QUARTER CAKE BOXES

Box for	r 6 Ot	arter Cake	s each,	\$1.10	Box fo	r 16	Quarter Cakes	s each,	\$2 00
11	8~	**	4.6.	1.25	4.8	18	16	5.4	2.10
11	10	46	166	1.35	1.6	20	10		2.25
11	12	11	1.0	1.50	6.6	24	16	.66	2.35
66	14	66	19.6	1.75	11	30	ii.	8.6	2.50

FROST & ADAMS CO'S

AIR BRUSH LAMP BLACK AND SEPIA



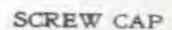
Air Brush Lamp Black in Tubes	-	-	per doz.,	\$2 75	each,	.25
Air Brush Lamp Black in Jars			16	4 80		.40
Air Brush Sepia in Tubes .			4.0	2.75	11	,25
Air Brush Sepia in Jars			**	4.80	44	.40

Jars contain twice the quantity of the tubes. The best Colors in the market for finishing Solar Prints, being the exact tones required and can be erased nearly as easy as crayon. Especially recommended for the Fountain Air Brush, being free from grit, very finely ground, and contain but little gum

Beware of colors not sufficiently ground for Air Brush use

FROST & ADAMS CO'S BRILLIANT GOLD AND SILVER

For Water Color and Illuminating Work





GLASS JARS

Gold Silver

per dozen, \$3.00 each, .25

F. & A. CO'S WATER COLOR GOLD AND SILVER



Gold, Pale or Deep Silver

per dozen, .60 each, .05

FROST & ADAMS CO'S METALLIC WATER COLORS

IN ROUND SAUCERS



Metallic Water Colors are put up in round China-saucers, 10 saucers in a box, and may be had in the following brilliant shades: Pale Gold, Rich Gold, Lemon, Orange, Copper, Fire, Crimson, Silver, Patent-Green and Patent-Blue

We furnish these Water Colors in boxes containing the assortment, or

any one shade, as desired

To be mixed with water only, no waste, no odor; used by Architects, Designers, Artists, Amateurs and Professionals; it is positively the only satisfactory "Metallic" Water-Color on the market

Single Saucer .	-				-	 		each, .10
	-			-				per box, 1.00
Box of 10 Saucers	+	- 4	1.0	19	1.5		4.	per 602, 1.00

METALLIC PREPARATIONS FOR ILLUMINATING

Gold Snells Gold Saucers, 1 inch		ach .20 	Silver Shells . Silver Saucers, 1 inch	each,	.10
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DUNNE'S TRANSPARENT PASTEL COLORS IN TUBES

CLASS A

Apple Green
Blue Green
Brick
Bronze Green
Brown Madder
Burnt Sienna
Carmine
Cherry
Cobalt Blue
Dark Tan

Per Tube, .10

Dirt Color Olive Green Emerald Green Pink Flesh Purple Rose Madder Gold Gray Green Ruby Red Hunter's Green Sepia Silver Gray Ivory Black Lemon Yellow Terra Cotta Light Tan Violet Navy Blue

CLASS B

Blue Black
Bottle Green
Brown Ochre
Burnt Umber
Cardinal Red
Charcoal Gray
Dark Blue

Drab Golden Brown Indigo Blue Light Red Neutral Tint Old Gold Orange Per Tube, .15

Prussian Blue Raw Umber Seal Brown Slate Steel Gray Straw Color Vandyke Brown

CLASS C

Bismarck
Blood Red
Burnt Carmine
Cadmium Orange
Cadmium Yellow
Chrome Yellow
Chrome Yellow
Cologne Earth
Corn Color
Crimson Lake
Davy's Gray
Ecru
Flame Red
Gobelin Blue—Garnet
Hooker's Green

Indian Red
Lavender
Lilac
Magenta
Mahogany
Maple Green
Marine Blue
Moss Green
Myrtle Green
Naples Green
Naples Green
New Blue
Oak
Orange Vermilion
Payne's Gray

Per Tube, .20

Peacock Blue—Plum
Prussian Green
Quaker Green
Raw Sienna
Sage Green
Sea Green
Scarlet Lake
Scarlet Vermilion
Strawberry
Terre Verte
Turquoise Blue
Vermilion
Wine
Yellow Ochre

CLASS D

Alizarin Crimson
Alizarin Green
Auburn Hair
Aureolin — Amber
Bronze Gold for Rocks
Canary Yellow
Cerulean Blue
Cobalt Green
Dark Brown Hair
Fawn Color
Flaxen Hair

French Ultramarine Blue
Golden Sunset
Heliotrope
Italian Sky Blue
Light Brown Hair
Light Gold Hair
Maize — Mauve
Marechal Niehl
Nile Green
Old Rose
Pearl Gray

Per Tube, .25

Pink Sunset
Red Brown for Rocks
Red Gold Hair
Rembrandt's Madder
Reuben's Madder
Royal Blue
Sea Foam
Sea Shell Pink
Ultra. Ash Gray
Ven, Red — Viridian
Wild Rose Pink

DUNNE'S TRANSPARENT PASTEL COLOR BOX

Just What You Need for Coloring Photographs and Lantern Slides

mplete Box of 12 tubes, assorted	color	rs			41	each, \$1.25
ctra tubes of color for this box			4	10	-	.10
w Medium, 1 oz. bottles .					4	.15
d Medium, 1 oz. bottles					4	.15
ystal Polish 1 oz. bottles						.25
stel Ivory Black Liquid, in tubes						.10
stel Ivory Black, 1 oz. bottles		2				.40
stel Ivory Black, 2 oz. bottles						.80
ok of Instructions						.25

Made especially for transparent work, and without preparation except pistening surface with clear water to make color apply perfectly even. ill readily color Lantern Slides and every paper manufactured, except

PASTEL COLORS

INSTRUCTIONS

Artiso Platino and all collodion surfaces, for which two excellent mediums are furnished called "Old" and "New," as it is strictly necessary to use a milder quality on pictures or slides taken less than four months. These mediums are also invaluable for lessening or removing color from same surfaces when mistakes occur. When ordering, always specify which is desired, as "Old" is too strong for new

rfaces and will injure them. For collodion photos use Crystal Polish ter picture is colored; must be used only on these papers

These colors may also be used on Ivory, Leather, Burnt Wood, Silk,

tius, Velvets and other fabrics
They are called "Pastel Colors" because they give the soft mellow fect of dry pastel, and are partially composed of a fine powder, though will not wash off as dry pastel does, and are the only transparent lors on the market that furnish every shade desired, ready mixed for e, there being more than one hundred and twenty-five colors

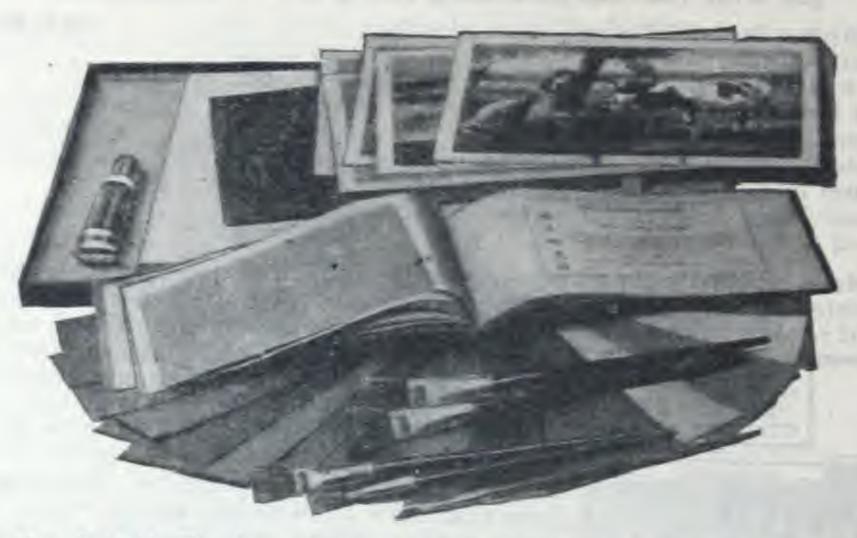
Dunne's Complete Box contains the following tubes of Colors:

Cobalt Blue, Flesh, Gold, Gray Green, Hunter's Green, Ivory Black, amon Yellow, Purple, Rose Madder, Ruby Red, Sepia and Silver Gray, hich are the most necessary shades for general use, with such complete structions for coloring both lantern slides and pictures, that, if folwed, any one can have nice results with very little practice. Amaur and Artist will find them indispensable and no one with a camera would be without them. For economy and convenience the 21-recess aina covered palette should be used, as colors left over are good until sed, if kept from dust. Use Russian or Red Sable Oil Brushes, Nos. 5, 7, 10.

DONT MISS THIS

Have you tried Dunne's Transparent, Pastel Ivory Black Liquid Color or retouching and building out defective negatives and prints. If not, ou have missed something great. Try it

JAPANESE TRANSPARENT WATER COLORS THE SELF BLENDING COLORS



For the Artistic Tinting of Photographs, Lantern Slides and Reproductions, where a Perfectly Transparent Color is required

No. 1. Complete Booklet contain each color being preceded by a	
No. 1. Brilliant Yellow 2. Deep Yellow 3. Orange Yellow 4. Flesh Tint 5. Geranium Pink 6. Japonica Scarlet 7. Royal Crimson 8. Mahogany Brown	No. 9. Sepia Brown 10. Light Green 11. Dark Green 12. Sky Blue 13. Deep Blue 14. Wistaria Violet 15. Pearl Gray
No. 2. School Edition containing for with instructions for using . Brilliant (Chrome Yellow) Orange Sky Blue (Prussian Blue) Japonica No. 3. Student's Palette, containin	Yellow (Chrome Orange) Scarlet (Carmine)
with brief instructions No. 4. Separate Color Films for Co able to stubs in book	mplete Booklets, adjust-
No. 5. Japanese Sizing Films for s	
No. 6. Instructions for Coloring I anese Water Colors, in pampelet	t dance
******	torm each, .10

ERLESS JAPANESE TRANSPARENT WATER COLORS

Extra Color Films, size 3 × 6 inches

CLASS A Each, .10

Corn Color Deep Blue Deep Tan Delft Blue Emerald Green Gamboge Garnet Golden Yellow Grass Green Hooker's Green, L Hooker's Green, D New Blue Indian Red Indigo Italian Blue Ivory Black Lamp Black Light Red Light Tan

Maize Magenta Maple Green Mauve Moss Green, L Moss Green, D Mountain Green Naples Yellow Navy Blue Neutral Tint Nile Green Olive Green Opaque White Payne's Gray Prussian Blue Prussian Green Raw Sienna

Raw Umber Red Earth Roman Ochre Royal Blue Ruby Red Sap Green Seal Brown Straw Terra Cotta Red Vandyke Brown Venetian Red Vermilion Violet Willow Green Wine Yellow Earth Yellow Lake Yellow Ochre

CLASS B Each, .15

arin Red
per
ethyst
Blossom Pink
utus Pink
eolin
wn Madder
nark Brown
mium Yellow
mium Orange
ary Yellow
mine
mine of Indian

Cerulean Blue Crimson Lake Cobalt Ecru Flame Red French Blue Geranium Lake Gobelin Blue Green Lake Heliotrope Hunter's Green Indian Yellow mine of Indigo Jaqueminot Red

Lavender Lemon Yellow Madder Carmine Marine Blue Myrtle Green Oak Old Rose Oxide of Chromium Peacock Blue Robin's Egg Blue Rose Madder Royal Purple Ruben's Madder

Sage Green Scarlet Lake Scarlet Vermilion Sea Green Sea Shell Pink Sepia Turquoise Blue Violet Carmina Viridian Warm Sepia Wild Rose Pink

CLASS C (Special Hair Colors) Each, .20

nde

Flaxen

ourn | Chestnut | Light Brown | Red Golden ck Dark Brown Light Golden Titian

The latest the same of the foreign and the same of the here are many new and beautiful shades. Their brilliancy and absotransparency are unequalled by any water color in the world. Each n contains color equal to two pans or tubes of ordinary water colors

Gold

THE ACME TRANSPARENT WATER COLORS

For Coloring and Painting Photo-Portraits on all kinds of Paper, Views, Lanterns, Transferotypes, Transparencies, Engravings, Artotypes and prints of all kinds, Tapestry, Paris Tinting and all kinds of Dye or Fabric Painting, Coloring Unmounted Photos for Transferring to Convex, or Plain Glass, Sketching, etc. In separate double pans and boxes



Opaque White, Deep Yellow, F	Palette and Instructions, a Gray, Brown Madder, Car Dark Green, Dark Brown lesh, Gold, Neutral Tin	mine, Chinese		
	Madder, Scarlet	and Colors	each	, \$2.50
Dark Blue, Dark	Brown, Deep Yellow, Fles	h. Scarlet and		
AANTIC , A			11	1.00
Acme Medium in Par	is, with Instructions .		19	.35
Acme Guide to Colos	ing, 50 pages		10	.25
Ac	me Pody, or Surface Colors,	each. 15		-
Acme Black Carmine, 35 cents	Chinese White Chrome Yellow	Cobalt Blue Vermilion	e	
Acme	Transparent Tinting Colors	s each 25		
Blue, Bright Blue, Dark Blue, Gray Brown, Dark Brown, Light Black, Blue	Green, Dark Green, Light Green, Olive Madder Red Neutral Tint Orange	Purple Rose Scarlet Violet Wine Yellow, De	ер	
Crimson Carmine	Flesh	Yellow, Len		

These colors are in solid, but moist form, and are a substitute for the ordinary fugitive liquid, or dye colors; are easy to apply and very effective, producing all tints, and are the only colors that will make a fast Indelible Black on Albumen Paper for Hair, Drapery, etc., and the set contains the only colors of this class guaranteed fast to light

With a view to greater permanency, many changes have recently been made in the composition of these colors, but still retaining the original names

PERMATEX STENCIL COLORS - Large Jars



PERMATEX STENCIL SET

Permatex Stencil Set of 8 Colors, per set, \$2.25

Permatex Stencil Colors in 1 oz. glass jars with lacquered tin tops

Class A each, .20

Ivory Black
Raw Sienna
Burnt Sienna
Burnt Umber
Golden Ochre
Stencil White

Class B each, .25 Chrome Green, med. Class B continued

Thall Green Moss Green Chrome Yellow, lem. Chrome Yellow, med.

Class C each, .30

Cobalt Blue Prussian Blue Ultramarine Blue Class C continued

Permanent Red Rose Pink Rose Lake Turkey Red Geranium Lake Mauve Lake

Class D each, .35

Carmine

Half ounce bottles, Class A, .12 Class B, .15 Class C, .18 Class D, .21

PLAN OF A COLORED CHART FOR WATER-COLOR PAINTING Showing an easy method of acquiring the knowledge of Mixing and Blending Colors into Tints.

by Mr. FREDERICK OUGHTON

Cobalt, Rose Madder Aureolin	Prussian Blue Burnt Sienna Gamboge	Vermilion, Yellow Ochre		
Cobalt, Raw Sienna	Prench Blue, Cobalt, Cobalt, Cobalt, Cobalt, Sepia, Light Red Rose Madder Raw Sienna 9 10 11 12 13 Sepia, Indigo, Indigo, Gamboge Sepia Burnt Sienna 9 To Sepia, Camboge Sepia Burnt Sienna			
Cobalt, Rose Madder Vellow Ochre	Indigo, Sepia	Rose Madder, Vellow Ochre		
Cobalt, Light Red	Indigo, Gamboge	Cobalt, Rose Madder		
Sepia, Crimson Lake	Indigo, Vellow Ochre	French Blue, Crimson Lake		
French Blue, Brown Madder	Sepia, Gamboge	Prussian Blue, Aureolin		
Indigo, Vandyke Brown, Crimson Lake	Cobalt, Vellow Ochre	Prussian Blue, Prussian Blue, Aurora Vellow Aureolin		

The Warm and Cool Grays (Nos. 1 to 7) are for Clouds, Hills, Mountains and distant effects; and are also useful in Buildings, Old Walls, Etc. Nos. 1 for the Grays in Flesh. Nos. 2 to 12 are for distance and middle distance Trees. Etc. Nos. 13 to 16 for foreground Trees. Nos. 17 and 18 are Purple used in Flowers, Fruit and foreground Shadows. Nos. 19,20 and 21 can be used for warming up Greens, and as Flesh Tints, also for Flowers, Fruit and Drapery. Each, .50 Size 14 x 8 inches.

FROST & ADAMS CO'S SUFERIOR

FINELY PREPARED ARTISTS' WATER COLORS

IN CHINA

Alizarin Crimson

Antwerp Blue

Burnt Sienna

Burnt Umber

Carmine

Cadmium Yellow

Charcoal Gray

Chinese White

Chrome Green

Chrome Yellow

Cobalt Blue

Gamboge

Crimson Lake

Emerald Green

Cadmium Yellow, Pale

Chrome Orange, No. 3

Chrome Yellow, Pale

Brown Pink



HALF PANS

Per Doz., \$.60

er Doz., \$.00

Gold Green Bice Hooker's Green, No. 1 Hooker's Green, No. 2

Indian Red Indian Yellow

Indigo

Ivory Black Lamp Black Lemon Yellow

Light Red

Madder Brown

Mauve

Naples Yellow

Neutral Tint New Blue

New Green

Olive Green

Each, \$.05

Payne's Gray
Permanent Blue
Prussian Blue
Purple Lake
Raw Sienna
Raw Umber
Rose Madder
Sap Green
Scarlet Lake
Sepia
Silver
Ultramarine
Vandyke Brown
Venetian Red

Vermilion

Warm Sepia

Yellow Ochre

Violet

Used by the Leading Schools of the United States

Extra finely ground by machinery. This series is prepared for the use of students, designers, etc. The colors are made in some cases entirely, and in others partly, from the true artists' pigments

Packed one dozen in a box. Write for sample cards. All dealers in Artists' Materials sell them

HALF PANS

WINSOR & NEWTON'S MOIST WATER COLORS



CLASS A

Antwerp Blue Bistre Blue Black Brown Ochre Brown Pink Burnt Sienna Burnt Umber Charcoal Gray Chinese White Chinese Blue Chrome Deep Chrome Lemon Chrome Orange Chrome Yellow Cologne Earth Cyprus Umber Dragons' Blood

Per Doz., \$1.65

Emerald Green Flake White Gamboge Hooker's Green, No. 1 Hooker's Green, No. 2 Indian Red Indigo Italian Pink Ivory Black King's Yellow Lamp Black Light Red Mauve Naples Yellow Naples Yellow, Deep Neutral Tint New Blue

Each, .13

Olive Green Payne's Gray Permanent Blue Prussian Blue Prussian Green Raw Sienna Raw Umber Roman Ochre Sap Green Steel Terre Verte Vandyke Brown Venetian Red Vermilion Yellow Lake Yellow Ochre

CLASS B

Alizarin Carmine Alizarin Crimson Alizarin Green Alizarin Orange Alizarin Scarlet Alizarin Yellow Brown Madder Carmine Lake Cerulean Blue Crimson Lake Cyanine Blue

Per Doz., \$3.00

Indian Yellow
Leitch's Blue
Madder Carmine, Iliana
Mars Yellow
Neutral Orange
Orange Madder, Iliana
Orange Vermilion
Permanent Brown
Permanent Crimson
Purple Lake
Roman Sepia

Each, .23

Rose Madder, (Alizaria)
Rubens' Madder
Ruby Madder, (Alizaria)
Scarlet Lake
Scarlet Madder, (Alizaria)
Scarlet Vermilion
Sepia
Spectrum Red
Spectrum Violet
Spectrum Yellow
Warm Sepia

Vinsor & Newton's Moist Water Colors, Half Pans - continued

CLASS C

admium Vellow, Estra Pala admium Vellow, Estra Pala admium Vellow, Middle Opaque admium Vellow, Deep cobalt Blue cobalt Green cobalt Violet merald Oride of Chrom.

Per Doz., \$3.75

French Blue
French Ultramarine
Indian Purple
Intense Blue
Lemon Vellow
Mars Orange
Mineral Gray
Mineral Violet
Orient Yellow

Each, .28

Oxide of Chromium, Transparent
Permane nt Mauve
Permanent Violet
Permanent Vellow
Pure Scarlet
Ultramarine Ash, Gray
Veronese Green
Viridian

CLASS D

ureolin urora Yellow urnt Carmine armine obalt Yellow ield's Orange Vermilion

Per Doz., \$6.38

Gallstone
Madder Carmine
Madder Lake
New Olive Green
Pink Madder
Primrose Aureolin
Purple Madder

Each, .45

Rose Doré Rose Madder Rose Madder, (Pink Shade) Scarlet Madder Violet Carmine Yellow Carmine

CLASS E

malt

Per Doz., \$9.00

Ultramarine Ash

Each, .75

WHOLE PANS

WINSOR & NEWTON'S MOIST WATER COLORS



CLASS A

Antwerp Blue Bistre Blue Black Brown Ochre Brown Pink Burnt Sienna Burnt Umber Char coal Gray Chinese White Chinese Blue Chrome Deep Chrome Lemon Chrome Orange Chrome Yellow Cologne Earth Cyprus Umber Dragons' Blood

Per Doz., \$3.00

Emerald Green Flake White Gamboge Hooker's Green, No. 1 Hooker's Green, No. 2 Indian Red Indigo Italian Pink Ivory Black King's Yellow Lamp Black Light Red Mauve Naples Yellow Naples Yellow, Deep Neutral Tint New Blue

Each, .25

Olive Green Payne's Gray Permanent Blue Prussian Blue Prussian Green Raw Sienna Raw Umber Roman Ochre Sap Green Steel Terre Verte Vandyke Brown Venetian Red Vermilion Yellow Lake Yellow Ochre

CLASS B

Alizarin Carmine Alizarin Crimson Alizarin Green Alizarin Orange Alizarin Scarlet Alizarin Yellow Brown Madder Carmine Lake Cerulean Blue Crimson Lake Cyanine Blue

Per Doz., \$6.00

Indian Yellow
Leitch's Blue
Madder Carmine, Alizaria
Mars Yellow
Neutral Orange
Orange Madder, Alizana
Orange Vermilion
Permanent Brown
Permanent Crimson
Purple Lake
Roman Sepia
The state of the s

Each, .45

Rose Madder, (Alizaria)
Rubens' Madder
Ruby Madder, (Alizaria)
Scarlet Lake
Scarlet Madder, (Alizaria)
Scarlet Vermilion
Sepia
Spectrum Red
Spectrum Violet
Spectrum Vellow
Warm Sepia

Vinsor & Newton's Moist Water Colors, Whole Pans - continued

CLASS C

admium Orange
dmium Yellow, Estra Pale
admium Yellow, Pale
dmium Yellow, Middle Opaque
dmium Yellow, Deep
obalt Blue
obalt Green
obalt Violet
nerald Oxice of Chrom.

Per Doz., \$7.50

French Blue
French Ultramarine
Indian Purple
Intense Blue
Lemon Yellow
Mars Orange
Mineral Gray
Mineral Violet
Orient Yellow

Each, .55

Oxide of Chromium, Transparent
Permanent Mauve
Permanent Violet
Permanent Yellow
Pure Scarlet
Ultramarine Ash, Gray
Veronese Green
Viridian

CLASS D

ureolin urora Yellow urnt Carmine armine obalt Yellow ield's Orange Vermilion

Per Doz., \$12.75

Gallstone
Madder Carmine
Madder Lake
New Olive Green
Pink Madder
Primrose Aureolin
Purple Madder

Each, .90

Rose Doré Rose Madder Rose Madder, (Pink Shade) Scarlet Madder Violet Carmine Yellow Carmine

CLASS E

malt

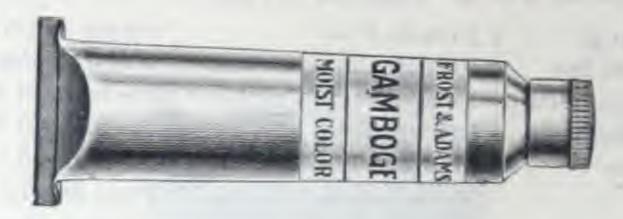
Per Doz., \$18.00

Ultramarine Ash

Each, 1.50

FROST & ADAMS CO'S MOIST WATER COLORS

In 3 Inch Tubes, for School Use



Per Doz., \$1.20

Green Bice

Each, .10

Alizarin Crimson Antwerp Blue Brown Pink Burnt Sienna Burnt Umber Cadmium Yellow Cadmium Yellow, Pale Carmine Charcoal Gray Chinese White Chrome Green Chrome Orange, No. 3 Chrome Yellow Chrome Yellow, Pale Cobalt Blue Crimson Lake Emerald Green Gamboge

Hooker's Green, No. 1 Hooker's Green, No. 2 Indian Red Indian Yellow Indigo Ivory Black Lamp Black Lemon Vellow Light Red Madder Brown Mauve Naples Yellow, Neutral Tint NewBlue New Green Olive Green

Payne's Gray Permanent Blue Prussian Blue Purple Lake Raw Sienna Raw Umber Rose Madder Sap Green Scarlet Lake Sepia Ultramarine Vandyke Brown Venetian Red Vermilion Violet Warm Sepia Yellow Ochre

This is a grade of Moist Water Colors, in tubes, we manufacture specially for schools and amateur use

Extra finely ground by machinery. This series is prepared for the use of students, designers, etc. The colors are made in some cases entirely and in other cases partly from the true artists' pigments

Packed one dozen in a box. Write to us for sample cards All dealers in Artists' Materials sell them

HALF TUBES

WINSOR & NEWTON'S MOIST WATER COLORS



CLASS A

twerp Blue
tre
le Black
own Ochre
own Pink
rnt Sienna
rnt Umber
arcoal Gray
inese White
inese Blue
rome Lemon
rome Yellow
rome Deep

CLASS B

rome Orange

logne Earth

prus Umber

vy's Gray

izarin Carmine
izarin Crimson
izarin Scarlet
own Madder
rmine Lake
rulean Blue
imson Lake
anine Blue
dian Yellow
eitch's Blue

Per Doz., \$1.65

Dragon's Blood Emerald Green Flake White Gamboge Hooker's Green, No. 1 Hooker's Green, No. 2 Indian Red Indigo Italian Pink Ivory Black King's Yellow Lamp Black Light Red Mauve Naples Yellow Naples Yellow, Deep Neutral Tint

Per Doz., \$3.00

Mars Yellow
Neutral Orange
Orange Vermilion
Permanent Brown
Permanent Crimson
Purple Lake
Roman Sepia
Rose Madder (Aliana)

Each, .13

New Blue Olive Green Payne's Gray Permanent Blue Prussian Blue Prussian Green Raw Sienna Raw Umber Roman Ochre Sap Green Terre Verte Vandyke Brown Venetian Red Vermilion Yellow Lake Vellow Ochre

Each, .23

Rubens' Madder
Ruby Madder (Alizana)
Scarlet Lake
Scarlet Madder (Alizana)
Scarlet Vermilion
Sepia
Spectrum Red
Spectrum Yellow
Warm Sepia

Winsor & Newton's Moist Water Colors, Half Tubes - continued

CLASS C

Cadmium, Orange Cadmium Yellow, Extra Pale Cadmium Yellow, Middle Opaque Cadmium Yellow, Middle Opaque Cadmium Yellow, Deep Cobalt Blue Cobalt Green Cobalt Violet

Per Doz., \$3.75

Emerald Oride of Chromium
French Blue
French Ultramarine
Indian Purple
Lemon Yellow
Mars Orange
Mineral Gray
Orient Yellow

Each, .28

Oxide of Chromium Oride of Chromium, Transparent Permanent Vellow Ultramarine Ash, Gray Veronese Green Viridian

CLASS D

Aureolin
Aurora Yellow
Burnt Carmine
Carmine
Cobalt Yellow
Field's Orange, Vermilion

Per Doz., \$6.38

Gallstone Madder Carmine Madder Lake New Olive Green Pink Madder Primrose Aureolin Purple Madder

Each, .45

Rose Doré Rose Madder Rose Madder (Pink Shade) Scarlet Madder Violet Carmine' Yellow Carmine

CLASS E

Smalt

Per Doz., \$9.00

Ultramarine Ash

Each, .75

0

In

L

WHOLE TUBES

WINSOR & NEWTON'S MOIST WATER COLORS



CLASS A

werp Blue
tre
e Black
wn Ochre
wn Pink
nt Sienna
nt Umber
arcoal Gray
nese Blue
come Lemon
come Vellow
come Deep

CLASS B

igon's Blood

ome Orange

ogne Earth

orus Umber

y's Gray

zarin Carmine zarin Crimson zarin Scarlet wn Madder mine Lake ulean Blue mson Lake nine Blue ian Yellow tch's Blue

Per Doz., \$3.00

Emerald Green Flake White Gamboge Hooker's Green, No. 1 Hooker's Green, No. 2 Indian Red Indigo Italian Pink Ivory Black King's Yellow Lamp Black Light Red Mauve Naples Vellow Naples Yellow, Deep Neutral Tint New Blue

Per Doz., \$6.00

Madder Carmine (Alizaria)
Mars Yellow
Neutral Orange
Orange Vermilion
Permanent Brown
Permanent Crimson
Purple Lake
Roman Sepia
Rose Madder (Alizaria)
Rubens' Madder

Each, .25

Olive Green
Payne's Gray
Permanent Blue
Prussian Blue
Prussian Green
Raw Sienna
Raw Umber
Roman Ochre
Sap Green
Terre Verte
Vandyke Brown
Venetian Red
Vermilion
Yellow Lake
Yellow Ochre

Each, .45

Ruby Madder (Mizarin)
Scarlet Lake
Scarlet Madder (Mizarin)
Scarlet Vermilion
Sepia
Spectrum Red
Spectrum Yellow
Warm Sepia

Winsor & Newton's Moist Water Colors, Whole Tubes - continued

CLASS C

Cadmium, Orange Cad mium Tellow, Extra Pale Cadmium Vellow, Pale Cadmium Yellow, Middle Opaque Cadmium Vellow, Deep Cobalt Blue Cobalt Green Cobalt Violet

Per Doz., \$7,50

Emerald Oride of Chromium French Blue French Ultramarine Indian Purple Lemon Yellow Mars Orange Mineral Gray Orient Vellow

Each, .55

Oxide of Chromium Oxide of Chromium, Transparent Permanent Vellow Ultramarine Ash, Gray Veronese Green Viridian

CLASS D

Aureolin Aurora Yellow Burnt Carmine Carmine Cobalt Yellow Field's Orange Vermilion

Per Doz., \$12.75

Gallstone Madder Carmine Madder Lake New Olive Green Pink Madder Primrose Aureolin Purple Madder

Each, .90

Rose Doré Rose Madder Rose Madder (Pink Shade) Scarlet Madder Violet Carmine Vellow Carmine

CLASS E

Smalt

Per Doz., \$18.00 Ultramarine Ash

Each, 1.50

WINSOR & NEWTON'S

MOIST WATER COLORS

STUDIO SIZE



CLASS A

Antwerp Blue Brown Pink Burnt Sienna Burnt Umber Charcoal Gray Chrome Lemon Chrome Yellow Chrome Deep Chrome Orange Emerald Green

Gamboge

Hooker's Green No. 1 Hooker's Green No. 2 Indian Red Indigo Ivory Black Lamp Black Light Red Mauve Naples Yellow Neutral Tint New Blue

Olive Green Payne's Gray Prussian Blue Raw Sienna Raw Umber Sap Green Vandyke Brow Venetian Red Vermilion Yellow Lake Yellow Ochre

CLASS B

Alizarin Crimson Brown Madder Cerulean Blue

Crimson Lake Indian Yellow Scarlet Lake

Each, \$1.50

Each, .75

Sepia Warm Sepia

CLASS C

Each, \$1.90

Cadmium Orange Cadmium Vello-

Cadmium Vellow, Pale | Lemon Vellow Cobalt Blue French Blue (French Ultramarine)

Viridian (Veronese Green)

CLASS D

Carmine

Each, \$3.25

Rose Madder

WINSOR & NEWTON'S MOIST WATER COLORS SLOW DRYING

IN COLLAPSIBLE TUBES



These colors are specially prepared to render them Slow Drying when exposed on the palette, and are therefore acceptable to Artists sketching in hot countries, or in hot Summer weather.

They are supplied in Tube form only, and at the same price as ordinary Water Colors in Tubes, and as they are not so liable to become hard in the Tube, and, washing well and easily, will be found suitable for covering large surfaces and for quick sketching.

For Colors and Prices see Page 155 and 156

"DECK" PALETTE TINTS RETOUCH COLORS

A Set of Five Tubes from No. 1, a Dark Red, to No. 5, a very Light Red

Studio	Size,	Set of 5	Tubes	12	10		-	per set	, \$3.75
Whole	166	911	(4)	1.0		 0.1		 -00	1.25
Small	166	41	-12	-					.75

HORADAM'S PATENT MOIST WATER COLORS

WHOLE



CLASS A

ntwerp Blue zure Blue listre lue Black one Black rown Ochre rown Pink urnt Gold Ochre urnt Light Ochre urnt Sienna urnt Terre Verte urnt Umber aput Mortuum assel Brown hrome Green hrome Yellow, D hrome Vellow, L hrome Vellow, Orange ologne Earth ragon Blood merald Green inglish Green lorentine Brown amboge old Ochre

CLASS B

raphite

reen Lake, D

armine Lake rimson Lake eranium Lake (Aniline)

CLASS C

lizarine Crimson lizarine Green, D lizarine Green, L lizarine Red, D lizarine Red, L lizarine Violet

Per Doz., \$3.00

Green Lake, L Hooker's Green, 1 Hooker's Green, 2 Indian Red Indigo Ivory Black Jaune Brilliant, D Jaune Brilliant, L. Japanese Yellow Lamp Black Lemon Yellow Light Ochre, 1 Light Ochre, 2 Light Red Magenta (Aniline) Malachite Green Mauve (Aniline) Mineral Blue Naples Red Naples Yellow Naples Yellow, Reddish Neutral Black Olive Green Payne's Gray Permanent Blue Permanent Green, D Permanent Green, L

Per Doz., \$4.00

Mars Orange Mars Yellow Rose Carthame (Aniline) Rose Lake, Deep (Aniline)

Per Doz., \$6.00

Brown Madder
Cadmium Yellow, D
Cadmium Yellow, Orange
Cadmium Yellow, L
Cerulean Blue
Cobalt Blue

Each, .25

TUBES

Permanent Green, M. Plant Green Pompeian Red Prussian Blue Prussian Green Raw Sienna Raw Umber Roman Ochre Roman Sepia Sap Green Saturn Red Sepia Sepia Color Terra Puzzuoli Terre Verte Vandyke Brown Venetian Red Vermilion Chinese Vermilion, L Vermilion Orange Vermilion Scarlet Vert Paul Veronese Vine Black Yellow Lake Zinnober Green, D Zinnober Green, L.

Each, .30

Rose Lake, Light (Aniline) Scarlet Lake Solferino Violet Lake

Each, .35

Cobalt Green, D Cobalt Green, L Indian Yellow Jaune Capucine Madder Lake, D Madder Lake, L

Horadam's Patent Moist Water Colors - continued

CLASS C

Madder Lake, Rose Oxide of Chromium Pink Madder Purple Lake

CLASS D

Aureolin Burnt Carmine Carmine Per Doz., \$6.00

Ruben's Madder Ultramarine Blue Ultramarine Red Ultramarine Violet

Per Doz., \$9.00

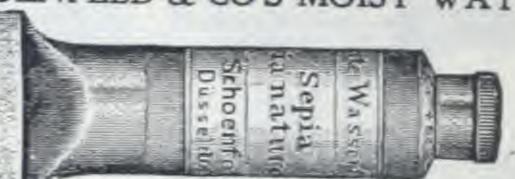
Madder Carmine Oxide Blue Green Eich, .35

Vandyke Red Vert Emeraude Vellow Ultramarine

Each, .50

Purple Madder Violet Carmine

DR. FR. SCHOENFELD & CO'S MOIST WATER COLORS



CLASS A

Aniline Magenta Aniline Mauve Antwerp Blue Bone Brown Brilliant Yellow, L. Brown Pink Burnt Light Ochre Burnt Sienna Burnt Umber Carmine Lake, 2 Chrome Yellow, D Chrome Yellow, L. Chrome Orange Dragon's Blood Emerald Green Gamboge Gold Ochre Hooker's Green, No. 1 Hooker's Green, No. 2

CLASS B

Asphaltum Carmine Lake, No. 1 Crimson Lake

CLASS C

Brown Madder Cadmium Vellow, D Cadmium Vellow, L Cadmium, Orange Per Doz., \$2.60

Indigo Indian Red Ivory Black Lamp Black Lemon Yellow Light Red Naples Yellow Neutral Tint New Blue Olive Green Permanent Green, D Permanent Green, L. Permanent Green, M Payne's Gray Prussian Blue Purple Lake Raw Sienna Raw Umber

Per Doz., \$2.80

Mars Vellow Mars Orange Rose Lake, L

Per Doz., \$5.40

Cobalt Blue Indian Vellow Madder Lake, D Malachite Green Each, .25

Roman Ochre Sap Green Saturn Red Sepia Terre Verte Vandyke Brown Venetian Red Vermilion, D Vermilion, L Veronese Green Violet Lake Warm Sepia Yellow Ochre, 1 Yellow Ochre, 2 Zinc Yellow Zinnober Green, D Zinnober Green, L. Zinnober Green, Jellow

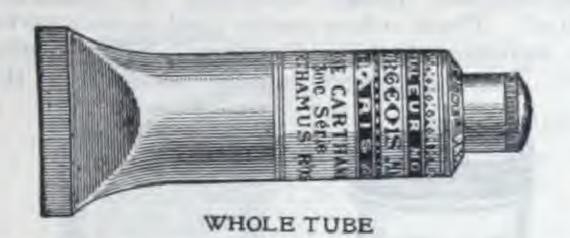
Each, .30

Safflower Red Scarlet Lake Scarlet Vermilion

Each, .50

Pink Madder Rose Madder Ruben's Madder Ultramarine Blue

BOURGEOIS' FRENCH WATER COLORS





CLASS A Tubes Per Doz., \$2.40 Each, .25 Pots Per Doz., \$3.60 Each, .35

Anwerp Blue Bistre Blue Black Brown Ochre Brown Pink Burnt Sienna Burnt Umber Chinese White Chrome Green, L Chrome Green, M Chrome Green, D Chrome Vellow, Light Chrome Vellow, Middle Chrome Yellow, Deep Chrome Yellow, Lemon Dragon's Blood

Emerald Green Flake White Gamboge Green Lake Gold Ochre Hooker's Green Indian Red Indigo Italian Pink Ivory Black Lamp Black Lemon Yellow Light Red Naples Yellow Naples Yellow, Greenish Neutral Tint

Olive Green Payne's Gray Prussian Blue Prussian Green Raw Sienna Raw Umber Roman Ochre Sap Green Sepia Sky Blue Vandyke Brown Venetian Red Warm Sepia Yellow Lake Yellow Ochre

CLASS B Tubes Per Doz., \$3.60 Each, .35 Pots Per Doz., \$6.00 Each, .55

Ultramarine Blue, D

Brilliant Yellow Crimson Lake, L Crimson Lake, D New Blue Purple, L

Purple, D Trans. Green Blue Trans. Green, L Trans. Green. D Ultramarine Blue, L

Vermilion, L Vermilion, D Violet, L Violet, D

Tubes Per Doz., \$4.80 Each, .45 Pots Per Doz., \$9.00 Each, .80 CLASS C

Brown Madder Carmine No. 2 Cerulean Blue Cherry Madder Cypress Green, No. 1 | Rose Carthame Cypress Green, No. 2 Geranium Rose Pink Madder

Rose Madder Scarlet Lake Veronese Green

CLASS D Tubes Per Doz., \$9.00 Each, .80 Pots Per Doz., \$15.00 Each, \$1.30

Cadmium Yellow, Lemon | Cadmium, Yellow, M | Cobalt Blue Cadmium Yellow, L&D Cadmium Yellow, Orange Indian Yellow

CHINESE AND FLAKE WHITE

per doz., \$3.60 each, .35 Double Tubes .

UNIVERSAL GOUACHE COLORS

For Artists, Architects, Decorators, Flower Painters, Art Institutes, and for sketches of any kind. These colors can be used on any surface such as Paper, Canvas (for imitation Gobelin Tapestry), Silk, Leather, Wood, Plaster, Mortar, etc. These packages contain much more than those of other brands

SCREW TOP



GLASS JARS

Permanent Blue

Prussian Blue

Raw Sienna

Raw Umber

Sap Green

Saturn Red

Terre Verte

Warm Sepia

Yellow Lake

Zinc White

Vandyke Brown

Zinnober Green, D

Zinnober Green, L

Sepia

Permanent Green, D

Permanent Green, L

Per Jar, .30

Antwerp Blue Brilliant Black Brown Ochre Burnt Ochre Burnt Sienna Burnt Umber Carmine Lake, No. 2 Cassel Brown Chinese White Chrome Green Chrome Yellow, D Chrome Yellow, L. Chrome Vellow, Onage Dragon Blood Emerald Green English Red Gamboge

Carmine Lake, No. 1 Crimson Lake French Blue Geranium Lake

Brown Madder Carmine . Cobalt Blue

Gold Ochre Hooker's Green, No. 1 Hooker's Green, No. 2 Indian Red Indigo Ivory Black Jaune Brilliant, D Jaune Brilliant, L. Lamp Black Lemon Yellow Light Ochre Naples Yellow Naples Vellow D Naples Yellow, Reddish Paris Blue Payne's Gray

Per Jar, .50

Mauve New Blue Rose Carthame Scarlet Lake

Per Jar, .60 Madder Lake, D Madder Lake, Rose Ox. of Chromium Bluefireen

Ultramarine Blue, D Ultramarine Blue, L. Vermilion Violet

Purple Lake Vert Emeraude

Per Jar, .75

Cadmium Yellow, L | Cadmium Yellow, M Indian Vellow

These colors have qualities not possessed by any others, the result of the application of an important invention

SCHOENFELD'S PERMANENT WATER COLORS AND CHINESE WHITE



IS IN SCREW

CAP JARS

CLASS A
Per Doz., \$4.00
Per Bottle, .30

Antwerp Blue Asphalt Brilliant Yellow, D Brilliant Yellow, L Bone Brown Brown Ochre Brown Pink Burnt Gold Ochre Burnt Sienna Burnt Terre Verte Burnt Umber Cassel Earth Charcoal Gray Chrome Green Chrome Yellow, D Chrome Yellow, L Chrome Vellow, M Chrome Yellow, Orange Chinese White, Permanent Cologne Earth Cremintz White Dragon's Blood Emerald Green Flake White

CLASS B

Crimson Lake French Blue Geranium Lake

CLASS C

Brown Madder Cadmium, Citron Cadmium, L Cadmium, Orange

Gamboge Gold Ochre Gold Yellow Green Lake, D Green Lake, L Hooker's Green, No. 1 Hooker's Green, No. 2 Indian Red Ivory Black Indigo Japan Yellow Lamp Black Lemon Yellow Light Red Mauve Mineral Blue Naples Yellow Naples Yellow, Reddish Neutral Tint, No. 1 Neutral Tint, No. 2 New Blue Olive Green Payne's Gray Permanent Blue

Per Doz., \$5.00 Mars Yellow

Mars Vellow Mars Orange Rose Carthame

Per Doz., \$3.50 Cerulean Blue Cobalt Blue Emeraude Green Indian Yellow Madder Lake, L



Permanent Green, D Permanent Green, L Permanent Green, M. Prussian Blue Raw Sienna Raw Umber Roman Ochre Sap Green Sepia Terre Verte Ultramarine Yellow Vandyke Brown Venetian Red Vermilion, L Vermilion, Chinese Warm Sepia Yellow Lake, D Yellow Lake, L Vellow Ochre, No. 1 Vellow Ochre, No. 2 Zinc White Zinnober Green, D Zinnober Green, L Zinnober Green, M

Per Bottle, .50 Scarlet Lake Scarlet Vermilion

Per Bottle, .70

Madder Lake, Rose

Madder Lake, Beep Rose

Malachite Green

Ultramarine Blue

WINSOR & NEWTON'S

WINCHESTER BRUSH-WORK WATER COLORS



ACTUAL SIZE OF JAR

Winchester Brush-Work Water Colors

Alizarin Green Brown Madder Burnt Sienna

Burnt Umber

Charcoal Gray Chinese White

Chrome Deep

Chrome Lemon

Chrome Orange Chrome Vellow

Cologne Earth

Deep Ultramarine Emerald Green Emerald Oride Chromium

Hooker's Green, No. 1

Hooker's Green, No. 2 Indian Red

Indian Yellow

Lamp Black

Light Red

Light Ultramarine

Mauve, Blue Shade

Mauve, Purple Shade Middle Ultramarine

Naples Yellow

Neutral Tint

per doz., \$4.80 per jar, .40

New Bine

Permanent Crimson

Permanent Green

Permanent Scarlet

Prussian Blue

Raw Sienna

Raw Umber

Sepia

Vandyke Brown

Vermilion

Viridian

Vellow Ochre

For Scholars and Art Students, also adapted for Decorative Designing, Illustrating, Wall Paper Pattern Making, Designs for Cotton, Muslin Printing, Air Brush Work, and many uses where high-grade Artists' Colors are now called for.

SEMPLE'S WHITE IN PORCELAIN GLASS JARS



Semple's White is a moist water color for all artistic water color purposes. It remedies every trouble experienced in the use of other whites: proved after four years' practical test

It can be used in any way: As a water color wash, a body color, in the air brush, or as your

fancy may dictate

It flows easily from the brush, mixes with all other water colors except other whites, has the smoothness and slickness of oil color, and will not crack, peel or blister

No matter how hard it may dry in the palette it will moisten up immediately with water; can

be used as thick as desired; makes no difference as to the working of other colors over it

Another thing: You can work over this white before it is wholly dry without the white working up, which affords a saving of minutes that ultimately stand to represent profit. It affords a faster daily production

and work of a higher character

This white when used pure, or mixed with other colors, will not rub or smut, stays where it is put and is an especial winner in retouching photos for halftone reproduction, because it removes every last difficulty that this kind of work has been heir to. Evidence of this lies in the fact that 80 per cent of the largest photo-engraving concerns in the United States are using it to the exclusion of all other whites. In halftone reproduction the necessity for a white that would afford as good results by electric light as by daylight has been a long recognized want. This want is fully and squarely met by Semple's White. A halftone negative from copy, treated with this white, maintains values down to the most delicate tones without any forcing or fussing, and these values are maintained uniform under all conditions, either by daylight or electric light. Many of the best artists and engravers consider this alone reason enough for its use

We know that the use of Semple's White will insure the profit you must have Don't fail to try this good white and give it the hardest trial you can think of. Prove our claims in your own way

Twenty-five cents worth of this white will go further and afford more pleasing results than any other similar quantity of white made by anyone anywhere

We are New England Agents for Semple's White

WINSOR & NEWTON'S LIQUID WATER COLOR MEDIUMS AND WHITES



SCREW CAP JAR

Prepared Gum Water

Water Color Megilp

Matt Gold Size, in pots

Burnish Gold Size, in pots

Prepared Ox Gall, in pots

doz., \$3.75 each, .35

Prepared Ox Gall, in small

pots doz., \$1.90 each, .20



SMALL BOTTLE

Chinese White, small Bottle			1	per doz.,	\$1.90	each,	.20
Chinese White, large Jar	4	7	4	11.	3.75	.01	-35
Chinese White, extra large Ja-	Г			-61	7.50	17.6	.65



WINSOR & NEWTON'S MOIST WATER COLORS CHINESE WHITE

IN SMALL AND LARGE TUBES

Small size Tube

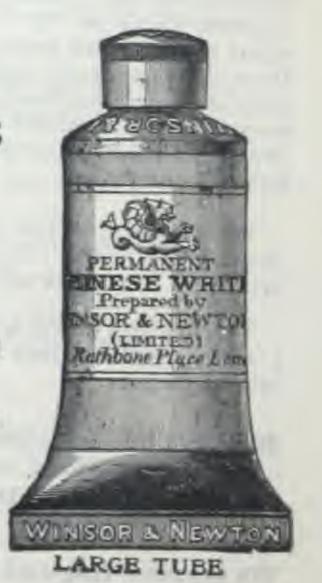
per doz., \$1.90 each, .20

Large size Tube

per doz., \$3.75 each, .35

Extra large size Tube

per doz., \$7.50 each, .65



WINSOR & NEWTON'S

"ALBANINE" AND "PROCESS BLACK"

For Drawing in Black and White for Reproduction





Albanine a pure photographic white, in bottles per doz., \$3.75 each, .35 Process-Black a dead black of great density 3.75

By the use of Albanine and Process-Black the difficulty hitherto experienced of preserving the true values of the lights, in drawings made for Process reproduction, is entirely obviated

TALENS' PHOTOGRAPHIC GLOSSY COLORS FOR PHOTO ENGRAVERS



Per Doz., \$3.00

Albumen White 1 Albumen White 2 Albumen White 3

Burnt Sienna Sepia Yellow Ochre

Per Doz., \$7.50

Carmine

Scarlet

Per Tube, .75

Per Tube, .25

Cobalt

Retouch 1 (reddish)

Retouch 2 (brownish)

Retouch 3 (blackish)

WINSOR & NEWTON'S LIQUID WATER COLORS, INKS, ETC.



FULL SIZE BOTTLE



SMALL SIZE BOTTLE

A - Y - I				FULL	SIZE			HALF	SIZE	
Asphaltuni		- 1	per doz.	\$3.75	each	1, .30	per doz.			115
Carmine .			1.5	3.75	9.0	.30	16	1.90	12	.15
Crimson Lake	10	2	(6)	3.75	11	.30	14	1.90	0	.15
Gold Ink .		-	11	3.75	- 44	.30	0	1.90	11	.15
Indelible Brow	n I	nk	- 14	3.75	W	.30	TK.	1.90	31	.15
India Ink .		14.	19	3.75	14.0	-30	10	1.90	14	
Lamp Black			177	8.75	43	.30		1.90	14.	-15
OxGall, colorle	SS(liquid	y xe	3.75	38	.30	44			.15
Prout's Brown	4		12	8.75	41	.30	47.	1.90	-58	.15
Prussian Blue			100	3.75	6		14.5	1.90	14	.15
Sepia .			410	3.75	92.	.30		1.90	44	15
Silver Ink			11		100	,20	- 15	1.90	110	.15
Vermilion		+	14	8.75		.30	4.5	1.90	18.60	.15
	7	1		3.75	1.5	.30	4.0	1.90	- 11	.15

INKOFF - TRACING CLOTH ERASING FLUID

koff Outfit, complete net, each, \$1.00

The outfit consists of one Bottle Inkoff, Sponges, Cloths and Directions ruse. For erasing black waterproof drawing ink lines and figures thout injury to the tracing cloth

DIRECTIONS FOR USING INKOFF

- 1. Inkoff can be used repeatedly over the same rface without injury to the tracing cloth, and ies quickly without friction. New lines can be awn immediately even if the tracing cloth is oist
- 2. Always insert a clean blotter underneath the acing cloth to prevent the liquid coming in conct with the drawing or drawing board
- 3. To cut off the ends of lines clean and sharp, ace a piece of heavy paper over the portion that to remain. Apply the cloth folded to a point ghtly moistened with Inkoff
- 4. Use a sponge saturated with the liquid for reoving large sections. A cloth is more desirable rerasing small or intricate parts. Fold to a point, disten with Inkoff and apply. Use a clean blotter absorb the surplus
- 5. Inkoff will not stain the tracing cloth; any scoloration due to dissolved ink can be wiped off
- th a clean cloth or sponge moistened with the liquid. Care must be sen to have cloth or sponge perfectly clean when making erasures
- Inkoff contains no acids injurious to the hands or tracing cloth. is intended for black drawing inks, but will also erase many colored as if the color has not penetrated the fibre of the cloth
- I. Erasures on old tracings are slower than immediate corrections
- On old tracings, permit the liquid to remain for a moment to disve the ink, which can then be absorbed with clean blotter, and the cing cloth thoroughly cleansed by wiping with clean cloth folded to coint slightly moistened with Inkoff. If unfamiliar with the use of koff make an experimental test on the edge of the tracing



POMEROY'S SNOW WHITE INK



In 1 oz. Bottles per doz., \$1.50 each, .15

LARRABEE WHITE INK

In 1 oz. Bottles perdoz., \$3.00 each, .25

For Black and Dark Shades of Bristol Board or Paper



FROST & ADAM'S CO'S BLUE PRINT WRITING AND ERASING FLUID

1 oz. Bottles per doz., \$1.80 each, .15

For making alterations or additions in clear white lines, upon blue prints. Flows freely from a drawing pen

BOURGEOIS' FRENCH DRAWING INKS

No. 304	Trial size Bottle	per doz	, \$1.50	eacl	1, .15
303	Small Bottle .	22.	2.25	10	.25
303E	is. Medium Bottl	144	3.00	eç	.30
302	Large Bottle .	1.0	4.00	44	.40



DAVIDS' LETTERINE

A WATER COLOR



READY FOR USE

A Rapid Drying and Lustrous Show Card Ink

	QUARTS		PIN	TS	HALF	PINTS	2 OUNCE		
Black	Doz. \$18.00	Bottle	0oz. \$10.50	Bottle .60	Doz. \$6.00	Bottle .40	Doz. \$1.75	Bottle .15	
Red	18.00		10.50	.60	6.00	.40	1.75	.15	
Blue	18.00		10.50	.60	6.00	.40	1.75	.15	
Green	18.00		10.50	.60	6.00	.40	1.75	.15	
Violet	18.00	1.00	10.50	.60	6.00	.40	1.75	.15	
Vellow	2222	1.00	10.50	.60	6.00	.40	1.75	.15	
White	18.00		10.50	.60	6.00	.40	1.75	.15	
Gold				4.	ķ i		*	.25	

Letterine will enable any person of intelligence to make his own show cards, price tickets, etc.

Can be used with brush or pen
An excellent ink for shading pens





HELIOS ERASING FLUID

For Alterations and Additions in Blue Prints

White Erasing Fluid	per doz.,	\$2.40	each,	.25
Red Erasing Fluid	11	2.40	11	.25
Yellow Erasing Fluid	-11	2.40	111	,25

CARTER'S

VELVET SHOW CARD COLORS

Always ready for the brush Velvet in name Velvet in finish





INDELIBLE INK

Vellow

Black Brown Dark	1	i	Dark Blue Dark Red Light Blue		L	ght l ustre	Blac	k	0	ight rang Vhite		n
			quart bottle				-		-	_	.FX	1.40
12		10			16	7			- 5	9	-54	.75
9.1	14	O'a	pint bottle .				-0.	- (4)	4	16		-90
21	14	111	1 pint bottle		-	-			- 1		11	15
Show	Card	Ink,	1 ounce bottle	9	7		4	-	i.		each	

Wide mouth bottles with screw caps, absolutely air tight

These colors give the desired rich, flat surfaces for price tickets, store cards, signs, etc. Specially adapted to writing on glass windows, lantern slides, etc. They flow evenly and smoothly from the brush

Rich effects done with artists' expensive water colors can be duplicated by using VELVET and have an added advantage over tube colors, by their natural creamy consistency

HOUSEHOLD INDELIBLE INK

Square Bottle, 1/2 oz., enclosed in an oblong card board box, with polished wooden stretcher, pen and holder. Six boxes mounted on an ornamental easel display card per doz., \$3.00 each, .25

An absolutely indelible black ink of unequalled intensity. The best home ink for marking linen and cotton, requiring no heat to set writings

HIGGINS' AMERICAN DRAWING INKS



EMPTY BOTTLES AND STOPPERS



BLACK INKS

WATERPROOF AND GENERAL

The Waterproof Drawing Ink (white label) is insoluble when dry, and is best for working drawings which have to stand handling, moisture or color washes

The General Drawing Ink (red label) is soluble, and is best for India Ink tints and washes, for tracing, for patent office and photo drawings and all fine line work

The Standard Liquid Drawing Ink of the world

COLORED INKS, ALL WATERPROOF

Blue Brick-Red Brown Carmine Green Indigo

Orange Scarlet Vermilion Violet Vellow

Blacks or Colors, 34 ounce Bottle

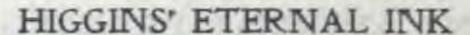
each, .25

BLACKS AND COLORS IN HALF PINTS, PINTS AND QUARTS

Black, Waterproof, insoluble when dry
"General, soluble when dry

COLORED INKS, ALL WATERPROOF

Blue Brick-Red Brown Carmine		Green Indigo Orange Scarlet			Vermilion Violet Vellow			
Half Pint	Bottle		4		-	2	each,	\$2.00
Pint	111						11	3.75
Quart	3.6	4			-		100	7,00
The ¼ ou other size			s pac	ked	one	dozei	to the	box;





2 ounce Bottle			4	per doz.	each, :10		
Half pint				411	4.20	y h	.35
Pint				66	7.20	46	.60
Ouart				4.6	12.00	KL	1:00

The 2 is ounce packed one dozen to the box; other sizes singly

A fine, fluent Carbon Writing Ink for general use. Black from the pen point and eternally remains so, proof to age, air, sunshine, chemicals and fire. The indestructible Ink of the Ancients revived. May be diluted for use in fountain pens

The right Ink for bank, legal and corporation use, business writing, general correspondence, and State, County and Town Records

HIGGINS' ENGROSSING INK

2 ounce Bottle		4	per dos	2., \$2.40	each, .20		
Half Pin	nt "		- 11	7.20	1.6	.60	
Pint	cr		3.5	12.00	11	1.00	
Quart	11		11.0	21.00	V.	1.75	

The 2 ounce Bottles packed one dozen to the box; other sizes singly

A dense black Indestructible Ink, specially adapted for all important writings, records and engrossing, and for fancy penmanship, card writing, etc. Waterproof when dry



All important documents or records intended to last undimmed by time should be written with the Engrossing Ink. All of the best writing inks now in common use (made of iron and nutgalls) fade into a dim brown or yellow in from fifty to ninety years. Our Inks will never alter in time, as carbon never fades. The Carbon Ink in ancient manuscripts hundreds or thousands of years old is found to be as bright and black today as though freshly written

"TESCO" WATERPROOF DRAWING INK

Tesco "Waterproof Drawing Ink, 34 oz. bottle . . . each, .25

The 'Tesco' bottle is a departure from the conventional drawing ink ottle. It has no machine made ridges to collect and hold dirt and is so nade that the draftsman can get at the last drop of ink with ease

The stopper top is heavy and no matter how placed or dropped the uill point will always point upward and cannot topple over, roll about nd smear the paper. This little idea is a valuable one, for many drawings have been ruined by the turning over of stopper tops

Waterproof Black, Soluble or Non-Waterproof Black, Carmine, Crimson, carlet, Brick Red, Orange, Yellow, Indigo, Blue, Violet, Green, Brown

DRAFTSMAN'S PEN-FILLING INKSTAND

A base, recessed to receive standard size (Higgin's ype) bottle of drawing ink; forked brass spring to seurely hold the bottle in lace; a lever arm, pivoted the base, having at the ne end a dipper and a cover for the bottle, and at the ther a rest for the hand. Iade of cast iron, japanned. Veight 21 oz.

It operates with certainy, supplies always the right mount, and the same quanity. Whether the pottle is



harge of ink. It positively will not "clog" or refuse to operate. No vaporation, the rubber cap is efficient. Nothing to wear out, noncorroive. It averts "accidents" as a bottle holder, as its weight prevents ready upseting. To fill the pen you simply reach for the ink, place hand in the rest to raise the dipper, and the instant the loop is inserted between the blades the pen fills. No wiping after filling. The dipper ever fails to place the ink between the blades, and none on the outside. One hand only is used, the other is entirely at liberty to retain its hold of the triangle or tee-square. You can't leave the bottle open. When the land is taken from the rest the cap automatically closes the bottle

CLOVER INKSTAND



Clover Inkstand

. each, .50

HOLDS ANY BOTTLE OF DRAWING INK

The Clover Inkstand is a boon to users of drawing inks, who desire a bottle holder that it is almost impossible to upset or in any way dislodge the bottles held therein. Adjusts itself to various shapes and sizes of bottles. Each bottle is held independently and may be instantly removed by simply opening the clasping spring

HOLDER FOR THREE BOTTLES HIGGINS' INK



No. 3. Holder with 3 Wells and Hinge Cover

each, .75

THE CARTER'S FOUNTAIN PEN FLUID



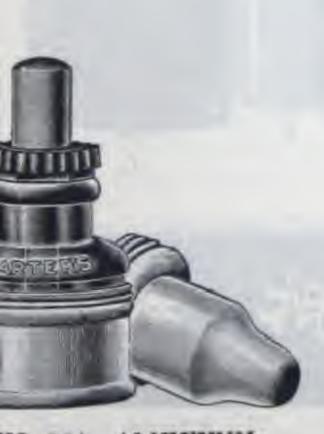


242. COUNTER DISPLAY RACK

NO. 246. 2 OZ. PANEL BOTTLE

242. 4 oz., French Panel, with combined Stopper and
Filler and Aluminum Screw Cap, 1 dozen in
box per doz., \$3.00 each, .25

246. 2 oz. French Panel, Hard Rubber Top, 3 dozen in
box . . . per doz., \$1 20 each, .10





NO. 511. ALUMINUM TRAVELLERS' CASE

NO. 517. WOODEN TRAVELLERS' CASE

511. 1 oz. Round, Fountain Pen Fluid, with filler, Aluminum Case, 1 dozen in box . per doz., \$3.00 each, .25

517. 2 oz., Round, Fountain Pen Fluid, with filler,
Birchwood Case. I dozen in box per doz., \$3.00 each, .25

STICK INDIAN INK









C.



D. SUPER SUPER INDIA INK

Α.	Pearl, very rich	+		2	201	0	per stie	k. \$3.00
B.	Half size, "Super Super"			-	-		41	1.00
C.	Black,			2	1		16	2.50
D.	Winsor & Newton's "Sup	er ;	Super	. * *		1	10	2.00

Stick Indian Ink - continued



		D						man atials	KO
Winsor 8	Newton's	Square (Gilt	2				per stick	
44	1.5	Oval Lic		1	1	+	16	11	.60
No.	14.0	Choice S	Square	-		4.	-	40	.40
4.4	11	Best, sm					4.	24	.20
Winson 8	k Newton's					*		44	.15
Pant Imi	tation Win	sor & Ne	wton's	Su	per S	uper	11	4.6	1.50
					-	*		10	.35
	Square Gilt						1	.10	7.80
Medium	quality Li	on's Hea	d Gilt			100	- 20		.40
No. of Contract of	4	11	Black				-	**	.25
Small T	ion's Head	Rlack				4.		3.6	.15
Small L	IOH S HEAD	Diuca						110	.10
Ordinary	y, size I			- +				44	1.5
Tapan In	k, flat stic	ks, size A	er le l	100		1 18			.50
Blue, Re	ed, or Yello	w .	P. 1743	-12.	10		*	"	.40

HIGGINS' PHOTO MOUNTER



	Same a few										
3 0	ounce S	crew-(apped Jar				ne	r dozen	21 00	and.	40
8	EV.	330			-		Pr	THOREM	· DT OU	eacn,	.15
14	+8	44	11	-	91	9		11.	3.00	H.	.25
16 0	Gallon	-31	11	2				1.6	6.00	0.0	.50
1	11	il	110	×	+			10.		4.6	2.00
				- 7		4				43	3 50

An entirely novel and superior adhesive, specially prepared for Mounting Photographs, Aristotypes, Scrap Pictures, Engravings, etc., and for general use as a substitute for fluid mucilage. It is not a Flour or Starch Paste, but is rather a Vegetable Glue, being a new discovery in the chemistry of adhesives. It is the most largely advertised and best known of all so-called "White Pastes," and is an original and Patented Product

SPECIAL NOTICE

There are many imitations and infringements of this article on the market, against which dealers are warned

GUARANTEE

The manufacturers' guarantee these goods absolutely against mold or other deterioration, but do not guarantee them against drying out or other changes if kept an unreasonable length of time or under improper conditions

It is a condition of the manufacturers' guarantee that these goods be properly stored, and that old lot be sold before any later or fresher lot

d

d

The 3 ounce and 6 ounce, packed one dozen to the box, the 14 ounce 14 dozen to the box; other sizes singly

HIGGINS' DRAWING BOARD AND LIBRARY MUCILAGE



unce S	crew-C	apped Jar			per de	ozen	, \$1.80	eacl	1, .15
14	(1)	41			- 11		3.00	60	.25
4.6	11	6.6			4.4		6.00	**	.50
allon	11	11					4	15	2.00
44	40	14						11	3.50

Novel Semi-Fluid Adhesive of great strength and body, specially bared for sticking paper to the Drawing Board, Repairing and Label-Books, and for Wood, Cloth and Leather Work generally. For use nordinary Mucilage or Paste it may be diluted with 25 to 50 per cent ater

IMPORTANT NOTICE TO DEALERS

erew-capped jars are the most convenient packages for goods of ready and quick sale, such as these, but they are not absolutely air-tight, ce the manufacturers do not guarantee these goods against drying or evaporation if kept too long in stock or if stored under improper nusual conditions

ct sunlight or cellar dampness

o not store them away upside down

not fail to sell the oldest lot first, before newer and fresher lots

ne 3 ounce and 6 ounce packed one dozen to the box; 14 ounce, % on to the box; other sizes singly

HIGGINS' OFFICE PASTE

The 4 and 8 ounce packed one dozen to the box; other sizes singly



HIGGINS' VEGETABLE GLUE



34 1	ь.	Cans		per de	0z.,	\$1.80	eacl	1, .15
11	b.	30		**		3.00	31.	.25
2.1	b.	**	į.	44.		6.00	2.6	-50
5 1	b.	**					TX	1.00
101	b.	W.	+	*			14	1.75

The ½ 1b., 1 1b. and 2 1b. Cans packed dozen to the box; other sizes singly.

WEIS BRUSH TUBE AND WHITE MUCILAGE

(Library Paste)





per dozen, .60 each, .05
' 1.20 ' .10
' 3.00 '' .25

CARTER'S PHOTO-LIBRARY PASTE



I size Tube

ium "



11 size	Tube										each,	.05
	e Tube								500.0		44	.10
			*		-						116	n=
ge size '.	Tube .	-			*	*	7.					.25
	crew car	, 10	инсе	+				2	2.		**	.20
11 1	natent hi	nge c	over	aud b	rush	, 7 01	ince	iki. II	A III		4.6	.25
	cre ca								18 11 -	201	11	.50
-44	11		ert					9 .			**	.75
	ky			quar							78.	1.00
lon Jar		11	4	4	-				4		11	2.50
andard	Paste	for 1	nount	ting	Phot	ogra	phs,	Eng	ravin	gs,	Etchi	ngs,
er on d	rawing 1	poard	s, or	anyth	ung '	where	e pas	teis	need	ea	10	

0.010-0.0

DAY'S WHITE PASTE WEIS BRUSH TUBES



3 dozen to a Case, 1 dozen in Counter Display Box

per doz., \$1.50 each. .10

COLLAPSIBLE TUBES

1 oz. Tubes, 2 dozen in Counter Display Box per doz., .80 each, .05

It is very convenient for school use, household purposes and photographers

HANDY PASTE JARS



Jar A. Size without cover, 21/8 × 21/4 in. 4 oz. per doz., \$2.50 each, .15

"B. 31/4 × 21/4 in. 6 " 4.00 " .25

"D, " 41/4 × 3 in. 10 " " 9.00 " .50

We beg to call your attention to this new water well jar. It is, we claim, the best on the market

SCREW CAP JARS

Jars,	6 1				3 dozen to	Case		per doz.,	.80	each,	.05
40	-0 11	** *			0		*	**	1.50	11	.10
	10	Ful	l half pi	nt,	1 "	K.C.		11	3.50	44	
1.4	20 "	4.6	pint		1 41	112		. 11			.25
					1		21		6.30	41	.50
	40 "		quart	-	1 **	**	2.	44	11.00	8.0	.75
Pails	.6 D	bauc	2		1 20	44		111			. 8 +3
	La Fa				1				18.00	2.5	1.00

Our jars are all full size and are larger than those listed as same size by many manufacturers. Please make comparison

The paste we guarantee is equal, if not superior, to any white paste. The jars, covers, brushes and labels have been made regardless of expense and the package complete is, we believe, the most attractive on the market. These jars are packed with patent corrugated paper packing, insuring a neat, clean jar for sale

HIGGINS' TAURINE MUCILAGE



115	11	11								2.40	9,5	.20
pint	64	4	4						××	3.60	**	,30
int	- 14	10	ATA		H.			1	44	6.00	4,6	.50
uart	1981						*		10	9.60	9.4	.80
gallon	Safety	Ship	ping	Can	(Inc	ludi	ng Ca	an).		eacl	1,	\$2.75
		11	7.1		9.5		11			**		5.00
. 0		11	**		4.6		40			10		11.50

. per dozen, \$1.20 each, .10

ounce Bottle, with improved Brush

An entirely new departure avoiding the defects of the cheap and nasty extrine and the dear and dirty gum mucilages. It is stronger, catches nicker and dries quicker than other mucilage, and is perfectly clear, lean, non-corrosive, non-sedimentary, and pleasant to sight and scent

The Bottles are packed one dozen to the box; the Cans singly

LePAGE'S LIQUID GLUE



1 OZ. BOTTLE



36 GILL CAN

1 oun	ce Bottle, 1 do	zen in	box	i d	8		per dozen	\$1.20	each	, .10
2	AC	11	11		_+	*	* 16	1.80	-xe	.15
Small	Size Tubes, 1	dozen	in box			7	9.6	\$1.20	49	.10
Large	Size Tubes,	3.7	10		/×	10	44.	1.80	81.	.15

PATENT TIN CANS WITH ADJUSTABLE BRUSH

1/2	gill,	1 dozen	in box	4	2			per dozen	\$1.80	ach	, .15
1	9.6	46	16	-	4	*	9		2.40	14.6	,25

Packed 6 dozen in a case

PATENT TIN CANS FOR MECHANICS

1/2 Pints	, 2	dozen i	n case	*	1.6			per	dozen,	\$3.25	each,	.30
Pints	1	44	11		4		-3-		ii.	5.50	191	.50
Quarts	1	-11	11			4			4.6	9.50	47	.80

IN TIN CANS FOR MECHANICS AND MANUFACTURERS

1/2 Gallons, 3	dozen	in case	1.61	1	per dozen	, \$18.50	each,	\$1.60
1 Gallon	**	46			16	53.00	64	3.00

WESTERN CEMENT - MENDS EVERYTHING





COUNTER DISPLAY BOX

Western Cement, in Bottles . . . per doz., \$2.50 each, .25

This preparation will mend anything that is broken and will hold with a tenacity that is truly wonderful and without an equal. It is being used exclusively in the repair departments of the largest crockery, jewelry, glassware, and manufacturing houses in the world and is far superior to anything of its kind ever produced

Try this. None like it. Take no other. Takes hold at once. No waiting or holding. Requires no strings or ropes for 48 hours. A trial will convince you that this cement will accomplish all we claim and is not misrepresented

It is the ideal cement for the household and business and should always be within reach

We absolutely guarantee that Western Cement will mend china, glass, bone, lava, stone, ivory, shell, pearl, terra cotta, wood, meershaum, marble, jewelry settings, leather and cast iron. It will never break in the same place. It restores the original strength, durability and appearance. It brings back to mended articles their original sound or ring. It is the only cement that restores the cohesive attraction between broken parts. It leaves no trace of cement upon the surface. It will resist cold or warm water. It is useful for mending lamp shades or gas globes, as dry heat produces no effect. It is transparent and has a pleasant odor. It contains no acid to eat the ware or injure the article mended. It will not evaporate or dry up in the bottle, every drop can be used

FROST & ADAMS CO.'S CROW QUILL PENS



Frost & Adams Co.'s Crow Quill Pens, each in Improved Holder with Cork Finger Piece, card of 12 pens per card, \$1.00 each, .10

HUNT'S HAWK QUILL PENS

ROUND POINTED

No. 107. Hunt's Hawk Quill Pens, each in holder, card of 12 pens per card, .75 each, .06

BALL POINTED STEEL PENS

EALL POINTED	ENVIRONMENTAL)	SAUL-POINTED SPANKE	4	S21 F	503 F		BAUL POINTED
506F	506EF	516F	5	21F	503F		509F
No. 506F. 506EF. 516EF. 516F. 521F. 503F. 509F.	Fine Medium Fine	Gray	 *****	per gro.,	\$1.50 1.50 1.50 1.50 1.50 1.50 1.50	per de	oz., .20 .20 .20 .20 .20 .20 .20

JOSEPH GILLOTT'S STEEL PENS

GENERAL STATE OF THE PARTY OF T	O CILLOTT'S O UNGGERNIC	G GILLOTT'S MAPPING PEN	O CILLOTT'S	O GILLOTT'SF	Tillio most of the College Col	Storious swort C	S LONG SHOULDER	STITOTING 3	O JUSTON CHARITYS 99 RIGID NO. STRA FINE	CONTRACT OF THE PARTY OF THE PA
V	V	1	V	V	1	V	V	V	V	V

IN ONE GROSS BOXES-12 PENS ON A CARD

	III ONE GROOD BONED IZ .		
290.	Lithographic and Drawing Pen, superfine points	per gro., \$ 6.50 per doz.,	60
291.	Mapping, Drawing and En-	Per Bron, & sade Per dans,	
2021	graving Pen	per gro., \$ 6.50 per doz., .	60
431.	Points between the fineness of		
	No. 170 and 290	per gro., \$ 4.00 per doz., .	40
659.	Crow Quill, superfine drawing		00
	points	per gro., \$ 6.50 per doz., .	60
837.	Long Shoulder Crow Quill,	TO 10 nor dos	TE
250	medium drawing points .	per gro., \$ 8.10 per doz., .	10
850.	Long Shoulder Crow Quill, superfine points	per gro., \$ 8.10 per doz., .	75
1000	and the total of the first	per gro., \$11.00 per doz., 1.	00
1000.	Rigid Extra Fine. An especi-	her Plant have no Les and	
1000.	ally smooth pen for unshad-		
	ed extra fine writing	per gro., \$ 1.50 per doz., .	15
	IN ONE GROSS BOXES-I		
170	Ladies' Pen, extra fine points		15
990	Lithographic and Drawing	ber Prout & store Land and	-
2001	Pen, superfine points	per gro., \$ 4.95 per doz.,	.50
291.	Mapping, Drawing and En-		
	graving Pen	per gro., \$ 4.95 per doz.,	.50
303.	The original extra fine pen .	per gro., \$ 1.40 per doz., .	10
404.	Public Pen with bead, fine p'ts	per gro., .85 per doz.,	.10
659.	Crow Quill, superfine drawing	e e e e e e e e e e e e e e e e e e e	50
	points	per gro., \$ 5.50 per doz.,	.50

GILLOTT'S HIGH CLASS PENHOLDERS

10110		04000	_				C3 (94) - 5 No.			
No.	607.	Satinwood	l, for	ord	linar	y slip	pens		per doz., .20 each .0	2
	667.	Ouills)							per doz., .50 each .0)5
-	1003.			tyle	for (Crow	Quill	Pen	s, Nos. 659,	0
		837 and	850	+					per doz., 1.50 each .l	
Corl	e Pen	Holders				1130			per doz., 1.20 each .1	.0

KEUFFEL & ESSER CO.'S CROW QUILL PENS



Crow Quill Pens, each in Improved Holder with Cork
Finger Piece, card of 10 pens . . . per card, \$1.00 each, .10

BLANZY, POURE & CO.'S FRENCH CROW QUILL PENS

No. 320. Crow Quill Pens, each Pen on a Holder, 1 dozen on a card; also 1 extra large Holder . . . per gro., \$3.30 per doz., .30

GEO. ROWNEY & CO.'S CROW QUILL PENS



SOENNECKEN'S ROUND WRITING PENHOLDERS



No. 3560. Penholder for Round Writing Pens . . . each, .16

F. SOENNECKEN'S SYSTEM OF ROUND WRITING

et Boo	k for se	f-instructi	on, with 25 assorte	ed pens .	. each,	\$1.00
11	16	44	without pens			.65
16	1.1	45	bound in clotl	h, with 25 pen	s "	1.60
ny Boo	k. no ir	structions	(School edition),	25 asst. pens	- 15	.70
h)	61	4.6	(School edition,)	no pens .		.35
ens, sing 8 wid	gle poin	ted, No. 1	2, 2½, 3, 3½, 4 2B, B, M, MF, F	F, 2F, 3F	er gross	.35
ens. dou	ble poir	ited, No.	10, 20, 30, }	per box.	4 gross	
2 wid	ths.	E	M F	" doze		.50
mnle a	ssortule	nt of singl	e and double pens.	, 25 in a box	per box	c, .35

Nound Writing

desirable in every profession. Engineers, Architects and Draughtsmen ill use it for titles and lettering on drawings. Book headings, policies, intracts, leases, etc., are distinct and ornamental written in this style. This System has met with unexpected and flattering success. An edition

English is published under the following titles:

A.—Handbook for Self-instruction and Exercise

B .- Copybook for Instruction in Schools

The handbook is a guide to the whole system; how to form the letters and to avoid mistakes; 28 finely lithographed plates, with numbers, lphabets, etc., for exercise. The copybook for schools contains the lates only, reserving the explanation for the teacher

INGLE AND DOUBLE POINT ROUND WRITING PENS

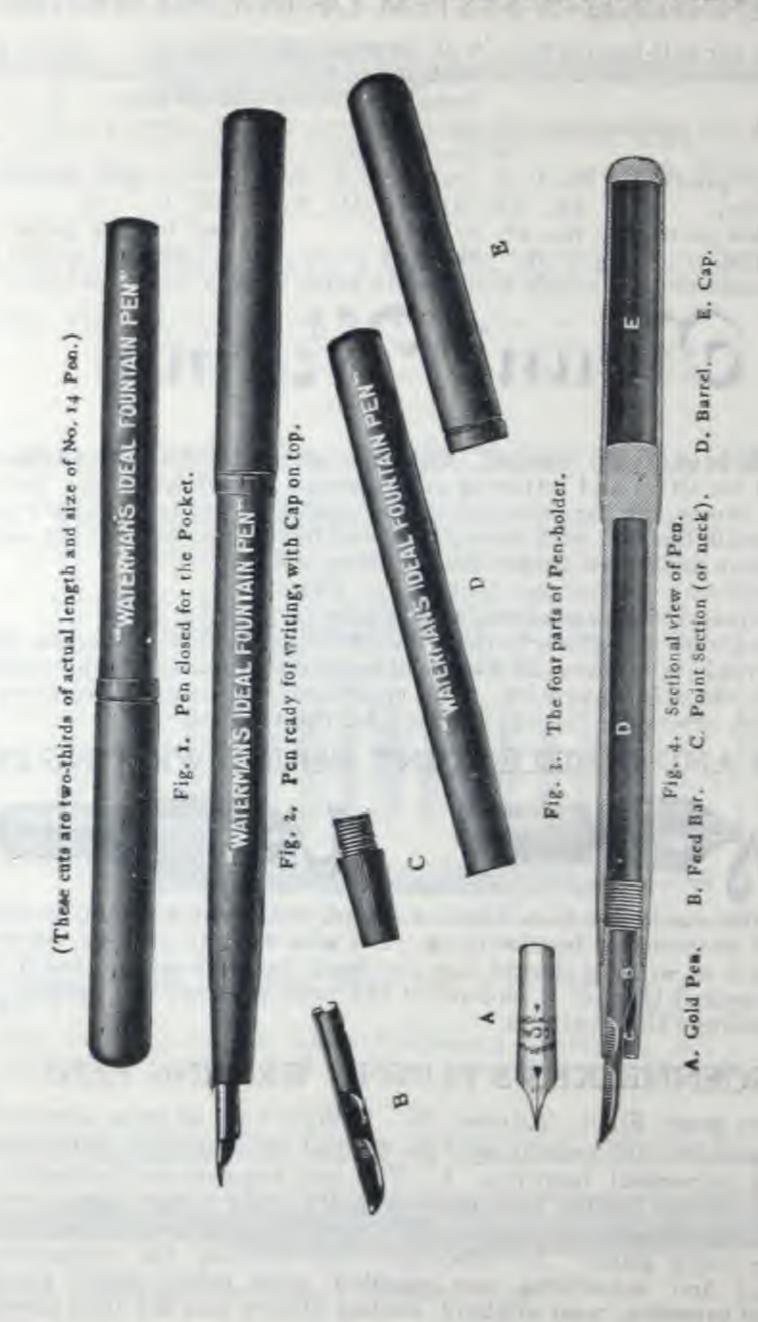


Especially made for this kind of script, with which it can be written a rapidly as common handwriting. All who wish to acquire perfection this style of writing should buy the Book for Self-instruction if there is no competent teacher. The use of the pens without the proper guide will discourage the beginner

SOENNECKEN'S FLUENT WRITING PENS

Nos., per gross, \$1.10; ¼ gross, .35. Sample box, 25 pens, assorted, .25 Constructed on the principle of the Round Writing Pens, they have the ollowing important features. 1.—The pen requires no pressure, and, herefore, writes easier and more rapidly than other pens. 2.—The bove peculiarity and the shape of the points prevent scratching entirely, even on rough paper. 3.—They give the writing the appearance of iniformity and steadiness not equalled with other pens. 4.—They require no pressure, wear slightly, outlast others, and are thus cheaper

WATERMAN'S IDEAL FOUNTAIN PEN



Waterman's Ideal Fountain Pen - continued

2,	12	and	22	*	each,	\$2.50	Nos.	2	and	22, Gold	Mounted	each,	\$3.50
8,	12	. 11	23		42	3.50		5	11	23,	16	1.0	4.50
ŧ,	14	1.1	24		11	4.50		4	16	24,	ii.	14	5.00
5,	15	41	25	*	 XX	5.00		5	16	25,	14.	44	6.00
i,	16	. 11	26		3.6	6.00		6	-61	26.	11	17.	7.00



The demand for Fountain Pens for business purposes as well as for pocket convenience is now universal. It is recognized, however, that the purchase of anything short of the best, because it is cheap, is the poorest kind of economy. A Fountain Pen must be manufactured

entific principles by expert workmen, employing the very highest of material. It must not leak or blot; it must be ready to write the t it touches the paper and in fact must fulfil every demand made it by the most critical writer

have selected for our stock, therefore, the Waterman Ideal ain Pen, which has for many years maintained its position as the ard of the world. Its name is the accepted synonym for everything high grade in this line. We carry a very large assortment, ing special points for bookkeepers' and stenographers' use, and olding nibs for carbon copying, all of which are offered at the unitetail prices maintained throughout the world. Every pen is absorbed.

guaranteed and is sold with the underng that if it does not give perfect saton it may be exchanged or returned.
pleasure to us to show these goods
will spare no pains to fit the hands
customers, sending to the manufacfor assortments of special points if

ary



AUTOMATIC SHADING PENS



Assorted siz	es, N	os. 0, 1,	2, 3,	4, 5	-		- 1	per dozen	1, \$3.00	each,	.25
- 64	44	6 and	18					4.6	3.50	**	.35
Set of 6 Pen	s, ass	orted si	zes (inclu	ding	an .	Alpha	abet for e	ach		
pen)	4			-					per	set, \$1	1.50

THE BALLANCE RESERVOIR SIGN AND RULING PEN



NO. G.S.B. 33

No. G.S.	B.33. Box	x cont	ains Set	of 8	Pen	s, 1/8 t	o 1 inch	per	set, \$	2.25
B.	Separate	Pens,	1/8 to 1/2	inch			per doz.,	\$3.00	each,	.25
В.	et.	**	5% to 1	68			61	3.75		.40
BB.	Double E	nd Pe	ns, 1/8, 1	4, 3/8,	1/2		1.6	3.00	10	.25

The pens will carry enough thin fluid to rule a line 6 to 12 feet in length, or 20 to 40 letters or figures, with ink, water, turpentine, oil or varnish colors. For forming letters characters, figures, symbols, designs and ruling even edge lines and widths. Notice the reservoir between the pen blades

FLAT KOH-I-NOOR POCKET PENCILS

HIR MANUTH VIENNA

1546s. Koh-i-noor Half-length Pencil, flat, HB, sharpened, with nickel point protector, boxed in dozens per doz., \$1.00 each, .10

1546m. Koh-i-noor Half-length Pencil, flat, HB, sharpened, without protector, doz. in box per doz., .50 each, .05

THE AIR PENCIL

For Making Raised Letters and Relief Work



autiful effects in Raised Lettering can be produced

KOH-I-NOOR POCKET BOOK PENCILS



NO. 1516. MIDDLE

No. 1516. Koh-i-noor Pocket Book Pencil, round, HB,
bone top, extra thick, thick and middle,
3 dozen in a box . . . per doz., \$1.00 each, .10



NO. 1515c. THICK

No. 1515c. Koh-i-noor Pocket Book Pencil, hexagon, HB,
bone top, extra thick, thick and middle,
3 dozen in a box . . . per doz., \$1.00 each, .10



NO. 1515m. EXTRA THICK

No. 1515m. Koh-i-noor Pocket Book Pencil, hexagon, HB,
nickle top, extra thick, thick and middle,
3 dozen in a box . . . per doz., \$1.00 each, .10



No. 15611. Koh-i-noor Copying Pencil, round, thick, violet, celluloid top, 3 dozen in a box per doz., \$1.00 each, .10

No. 1515b. Koh-i-noor Pocket Book Pencil, hexagon, HB, bone top, extra thick, thick and middle, 3 dozen in a box . . . per doz., \$1.00 each, .10

KOH-I-NOOR PROPELLING POCKET PENCILS



NO. 1528

528.	Koh-i-noor	HB, yel	low	polish	ed, 1	nick	cel ends,	8 1/21	n. each,	.35
1528a.	11	it		16			**	5 in	. 4	.40
2201.	Koh-i-noor	Refills,	for	1528, 1	2 in	tin	box		per box,	.40
2202.	44	u	14	1528a,	6	144			94	.35

HB &"KOH-I-NOOR"POCKET PENCIL.Nº 1568.



NO. 1568

1568.	ebonized ends, 4 in each, .35
1568a.	Koh-i-noor HB or Copying, yellow polished, ebonized ends, 5 in each, .40
2202a.	Koh-i-noor HB Refills, for 1568 and 1568a, in a flat box of 6 refills per box, .25
1570.	Koh-i-noor Copying Refills, for 1568 and 1568a in flat box of 6 refills per box, .25
1578.	Koh-i-noor Copying Refills for 1568 and 1568a, in a flat box of 6 refills per box, .25
1527.	Koh-i-noor Half-length Pencil, 4 in box with protector per box, .35
1515b.	Koh-i-noor Pocket Book Pencil, hexagon, HB, bone top, middle thick and extra thick, 3 dozen in box per doz., \$1.00 each, .10
29a.	Koh-i-noor Short Pencils, HB, with metal screw, nickel holder, and 6 refills in box per box; .75
1519a.	Koh-i-noor Refills, for above, 12 in box per box, .60

KOH-I-NOOR ACCOUNT BOOK PENCILS

Compressed Lead, Hexagonal

"KOH-I-NOOR" ACCOUNT BOOK DENCIL & Gampizeous Secud



Koh-i-noor Account Book Pencil, hexagon, yellow polished, gold stamped one degree . . . per doz., \$1.00 each, .10

KOH-I-NOOR SHORTHAND PENCILS

Compressed Lead, Round

"KOH - I - NOOR" SHORTHAND PENCIL & Compressed Lead



Koh-i-noor Shorthand Pencil, round, yellow polished, gold stamped, one degree . . . per doz., \$1.00 each, .10

L. & C. HARDTMUTH'S

FAMOUS "KOH-I-NOOR" DRAWING PENCILS



MADE IN 16 DEGREES. FINELY GRADUATED

. 1500.	F to 9H, 1 d	ozen	in	box	2		per dozen,	\$1.00	each,	.10
	4B,	1.6	12	181			44	1.25	11	.12
	5B and 6B,	84		54		4	1.6	1.50	10	.15
	HB, Rubber	Tip		1411			41	1.75	11	.15

Extra	soft	and	very	black,
				large
bold I	The state of the s		6.7	

- Extra soft and very black
- Very soft and very black
- Soft and very black
- Soft and black
- Black for shading Medium hard and black for
- ordinary Drawing or Writing Firm for fine Drawing

- H Hard for Sketching
- 2H Harder for Outlines
- 3H Very hard for Architects
- 4H Extra hard for Engineers
- 5H Extra hard for Draughtsmen
- 6H Extra extra hard for Draughtsmen
- 7H Still harder
- 8H A shade harder than 7H
- 9H Exceptionally hard, for fine line work



HALF LENGTH, NICKEL POINT PROTECTOR

. 1517. Half length "Koh-i-noor" Pencil, HB Degree,

Patent Nickel Point Protector, 1 dozen in box, per dozen, \$1.00 each, .10

n order that the "Koh-i-noor" may be readily distinguished from her Drawing Pencils, it is made in a special Vellow Polish. The lead immeasurably superior to anything hitherto produced. By a new ocess of manufacture the Graphite assumes a highly compressed form, ich secures for it remarkable lasting qualities. Every pencil is mped with the name "Koh-i-noor," which is a registered trade mark all countries



L. & C. HARDTMUTH'S

KOH-I-NOOR COPYING PENCIL

No. 1562. Halflength 'Koh-inoor' Copying Pencil, Patent Nickel Point Protector, I dozen in box

per dozen, \$1.00 each, .10

KOH-I-NOOR RENEWABLE RUBBER TIP PENCIL

Hexagon, HB degree only, ex. quality rubber tips per doz., \$1.75 each, .15

KOH-I-NOOR ARTIST'S TUBULAR PENCIL

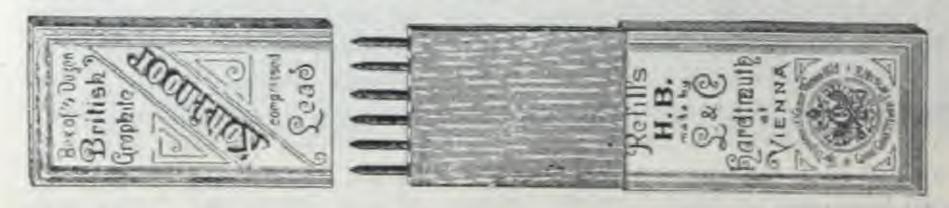
HB 8 "KOH-1-NOOR" 8 MADE OF CAC MADDITUDE AUSTRIA HHHHHHH

DOUBLE POINTED

Yellow Polished, HB and 6H, Gilt Metal Points . . . each, .40
SINGLE POINTED

Yellow Polished, H to 9H and HB to 6B, 17 deg., Gilt Metal Point. Specially useful for retouching, etc. . . . each, .25

KOH-I-NOOR LEADS FOR ARTIST'S TUBULAR PENCIL



6 Leads in Cedar Box, H to 9H, HB to 6B, 17 degrees per doz. boxes, \$8.40 per box, .60

HARDTMUTH'S "MEPHISTO" COPYING INK PENCIL



NO. 73B

per dozen, .50 each, .05 | Red, Red per dozen, .50 each, .05 Green, Green " Blue, Blue .50 .05 .50 Black, Black .05

"MEPHISTO" COPYING INK PENCIL

NOVY, "DELEPHESIO" COPYING, MADE BY L&C. HARDTMUTH IN AUSTRIA.

Violet

NO. 77

No. 77. Made in Violet only . . . per dozen, .50 each, .05

With red tip, or mouthpiece, which enables railway conductors to old the pencil between the teeth (frequently done while punching ickets), without soiling tongue or lips with violet coloring. This is an mprovement on the Famous 73B Copying Pencil now in use by all eading railway companies

"MEPHISTO" DRAWING PENCIL

Made in six degrees, expressed by letter and number on each pencil

3B. No. 1, Very Soft each, .05 | 2H. No. 4, Hard . " 2, Soft . .05 3H. " 5, Very Hard " B. " .05 4H. " 6, Extra Hard " 3, Medium . HB.

HARDTMUTH'S CELEBRATED "NEGRO" PENCIL

Black Polished Cedar. Made in Five Degrees

'Negro' Pencils. No. 1, Very Soft; No. 2, Soft; No. 3, Medium; No. 4, Hard; No. 5, Very Hard per dozen, \$1.00 each, .10

This remarkable Pencil combines all the best qualities of the Drawing Chalk, Crayon, Charcoal and Carbon Pencil, with the smoothness and luency of the high-class drawing Lead, thus rendering it the most useful Pencil ever produced for Art Students, Illustrators and Retouchers. It is strongly recommended by leading Drawing Masters on account of the complete absence of grit in its composition and because of the soft, et black, velvety effect produced by its use. "Negro" Pencils are also preferred by Photographers for retouching and spotting Platinotypes and Carbon-Prints

HARDTMUTH'S DIAGRAM CHALKS



No. 61B in Paper Bos. 6 Colors: Green, Brown, Vermilion, Orange, Blue and Yellow , per dozen, \$3.60 each, .30

HARDTMUTH'S ARTISTS' COLORED WAX CRAYONS

Or Creta Leavis, for Drawing or Sketching. 48 Colors

Per Dozen, \$1,00. Each, .10

- 50 Chrome Yellow
- 51 Gamboge
- 52 Orange Chrome
- 53 Yellow Ochre
- 54 Olive Green
- 55 Bronze Green
- 56 Light Brown
- 57 Raw Sienna
- 58 Venetian Red
- 59 Mars Orange
- 60 Vandyke
- 61 Cassel Earth
- 62 Burnt Sienna
- 63 Sepia
- 64 Lamp Black
- 65 Neutral Blue

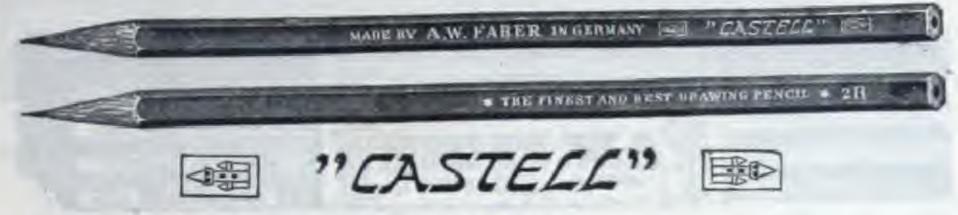
- 66 Dark Green
- 67 Sap Green
- 68 Leaf Green
- 60 Emerald Green
- 70 Chrome Green
- 71 Light Green
- 72 LightChromeGreen
- 73 Mineral Blue
- 74 Sky Blue
- 75 Cobalt Blue
- 76 Mauve
- 77 Ultramarine
- 78 Dark Blue
- 79 Blue Black
- 80 Violet Carmine
- 81 Light Violet Car.

- 82 Purple Violet
- 83 Vienna Lake
- 84 Scarlet
- 85 Vermilion
- 86 Carmine
- 87 Rose Madder
- 88 Madder Lake
- 89 Pink Madder
- 90 Flesh Tint
- 91 Gray Brown
- 92 Purple Brown
- 93 Purple
- 94 Lemon Yellow
- 95 Brown Ochre
- 96 Florence Brown
- 97 Lake

Sample Cards furnished

A. W. FABER'S

"CASTELL" DRAWING PENCILS



"Castell" Drawing Peucil, Green Polish,
Gold Stamp, Hexagon per gross, \$20.00 per doz., \$1.00 each, .10

This new Series of Finest Drawing Pencils is the fruit of investigations and experiments of a technical nature, which have been carried on for a number of years, and it exhibits, in all their superiority, the magnificent qualities of a Graphite in itself faultless to a nicety. The new product thus stands easily foremost among the manufactures of its kind. The 16 degrees in which it can be supplied: from 6 B, yielding the rich color of India Ink, to the extremely hard 8 H, fit for drawing on stone, are adapted to all the various purposes of professional employment and daily life and fill every want of the artist, designer, civil engineer or architect

An exceedingly fine point, firm and durable, to which these pencils may be sharpened, is suitable for the most delicate as well as the most vigorous work and, withal, wears off but little, thus rendering more service than that of any other lead pencil ever offered to the public

E. FABER'S COLORED SCHOOL CRAYONS

Fine Polish Pencils



the part of party and down the second of the party of the party of

Round, full length, 7 in a box, assorted colors .

per box, .35

A. W. FABER'S SIBERIAN LEAD PENCIL

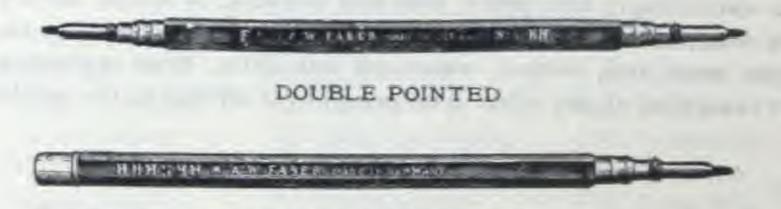
For Designing, Architectural Purposes, Stenography, Offices and Schools



Siberian	2B, B,	HB,	F, 1	H, 2H					per dozen,	\$1.00	each,	.10
11	3H, 41	H, 5F	I, 61	I, 7H,	SH				41	1.00	199	.10
31	3B, 4B	, 5B			4		,	15	100	1.20	11	.12
1.6	6B			7	8				ii	1.40		.15
Hexag	on, Na	tural	Pol	ished,	in :	16 D	egre	es				

A. W. FABER'S SIBERIAN ARTISTS' TUBULAR PENCIL

With Moveable Leads



SINGLE POINTED

Siberi	an Artist	s', short, HB 3 in	ches long	g, each, .15
	44	medium, HB 5	311	.20
	44	long, graded 2B to 8H . 6	1.0	11 .25
- 4	16.6	" graded 3B, 4B, 5B . 6	40	30
		" 6B 6 -		.35
	52	with double ends, F and 2H 61/2	- 11	" .40
	2,6	" 2B and HB 634	00	.40

Natural Polished. Ivory Head on single pointed

A. W. FABER'S CARPENTERS' PENCILS

Oval, With Broad Leads

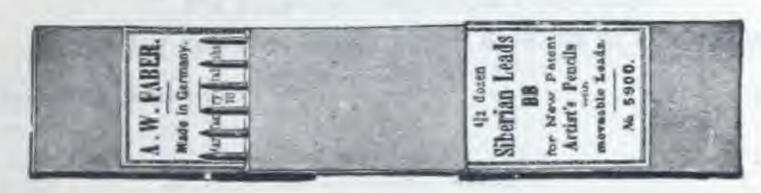
A.W. FABER Nº 2. Sermany.



No. 5460.	Leal Pe	ncils,	Nos.	1 and	2, 2 g	rades,	71/2	in.		per	doz.,	.40
5461.	Red	-61				,	71/2	46	140	6.6	4.6	.65
	Blue	44				- 4	71/2	66	1.4	- 66	166	.55
	Red and	Blue	Penci	ils .	. TV		81/2			1.6	3.6	.50
	Lead Pe				d, red	d pol-						
				2 .			71/2	4.1		8.4	e.c.	.45

In whitewood, not polished, blue stamp, A. W. FABER

A. W. FABER'S LEADS FOR ARTIST'S PENCILS



lack Leads for	Siberian	Artists'	Tubular	Pencils,	H to 6H	per bo	x, .60
-01	16.	11	110	-0	HB, B, 2B,	F "	.60
ti.	45	14.		it.	3B to 5B	216	.65
44.	1.0	44	116	**	6B	16	.70

A. W. FABER'S COMPASS PENCIL

A.W. FABER. Nº4 Surmany.

Compass Pencils, round, black polished, No. 4 per dozen, .50 each, .05



Compass Pencils, hexagon, red polished, No. 4 per dozen, .75 each, .08

These pencils are used in mathematical instruments, and will be found to retain their points for a long time

A. W. FABER'S

LOW-PRICED LEAD PENCILS IN DRAWING SETS



A. W. FABER'S "ROUND GILT" PENCIL



BLACK POLISH

"Round Gilt," Nos. 1, 2, 3, 4 and 5 . . . per dozen, .50 each, .05

These pencils rank directly after the "Hexagon Gilt" pencils in popularity. They are round, black polished, with gold stamp, and are made in five degrees of hardness, from No. 1 to 5

A. W. FABER'S "ENGLISH" DRAWING PENCIL

For Draughtsmen, Artists and Art Schools



No. 5060. "English," round, natural polish, 4B to 6H per doz., .50 each, .05

These pencils are made in 12 degrees of hardness to meet all practica requirements. They are round, natural polished

A. W. FABER'S LEAD POINTS

For Gold and Gold-Plated Pencil Cases

No. 5940.	A.B.C.D.	E. F. G. 1	H. I. F	C. L. M. N.	O, P, Q, R, S	per bo:	x, .05
5941.	No. 30	per box	10	No. 5970.	No. 4B	41	,25
5942.	70	10	.10	5971.	6B	46	.30
5943.	300	11.	.05	5972.	2B	4.6	.25
	9M	u	.05	5974.	50	43	.10
5944.	B	44	.10	5975.	80	11	.10
5945.	7	110	.10	5976.	10	4.4	.10
5946.	709	144	.10	5977.	1	11	.10
5947.	102	- 11	.05	5978.	12	11	.10
5948. 5968.	200	46	.05	Dorog	15		
4 17 212 1							

A. W. FABER'S CHALKS IN WOOD

No. 5205. Black Chalk, white wood, Nos. 1, 2, 3 per dozen, .50 each, .05

A. W. FABER'S BLACK CHALK POINTS

For Pencils with Movable Black Chalk

No. 5230. Black Chalk Points, for pencils, 6 in box, Nos. 1,
2, 3 per box, .15

A. W. FABER

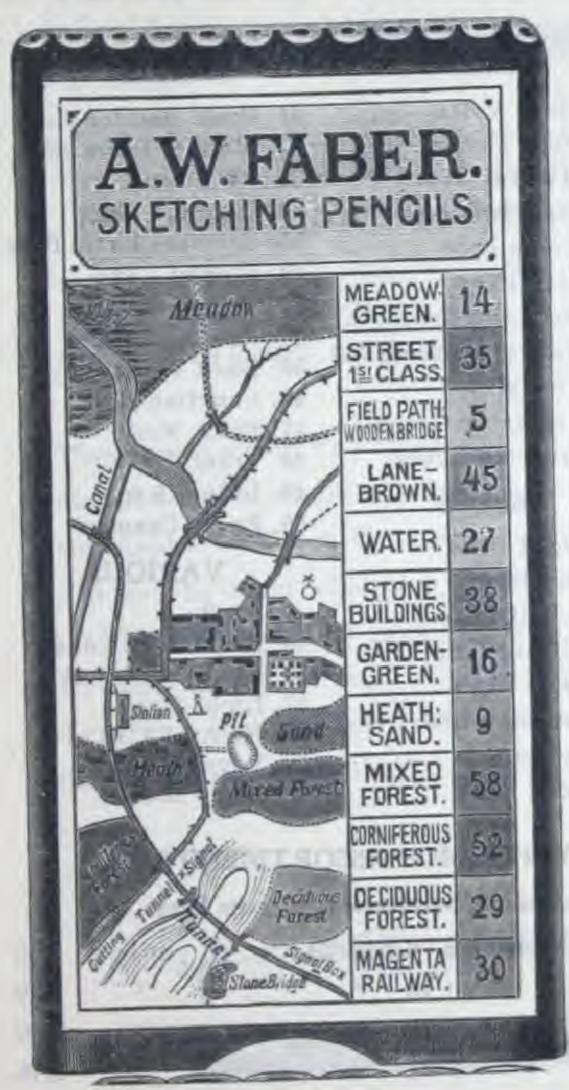
"CASTELL" POLYCHROMOS COLORED PENCILS IN SETS



Assorted	Colors	Artists'	Penci	ls, 12 i	u cardbo	ard box		nor how	#1 no
3.1.	- 61			18	44.	11		per box,	
131	4.0	- 4		94	W.	ii ii	10		1.50
				2.1				x (2,00
Assorted	colors,	full len	gth, 1:	2 in M	etal box,	hinge cov	er	per box,	\$1.00
		20000						16	.50

A. W. FABER

POLYCHROMOS COLORED PENCILS IN SETS



In producing this new series
of Polychromos Pencils the
principle has been followed of
bringing the colors in unison
with those usually employed
in the form of water colors.
It often happens that Colored
Pencils are desired to agree in
tint with existing water colors

41 inches long

Assorted	Colors	Artist's Pencils, for sketching,	12 is	n box		per box,	.60
61		Electrician's Pencils,	12	1.5	6	10	.60
**		Deaftsmen's Pencils,	12	33		16	.60

A. W. FABER "CASTELL" Polychromos Non-Fading Colored Pencils

Polychromos Non-Fading Colored Pencils . per doz., \$1.00 each, .10

BROWNS	GREENS	REDS
40. Light Ochre 41. Raw Sienna 42. Gold Ochre 43. Burnt Vellow Ochre 44. Brown Ochre 45. Burnt Sienna 51. Raw Umber 52. Bistre 53. Van Dyke Brown 54. Burnt Umber 55. Sepia 56. Warm Sepia	10. Terre Verte 11. Olive Green 12. Mineral Green 13. French Green 14. Green Bice 15. Sap Green 16. Hooker's Green, No.1 17. Hooker's Green, No.2 18. Viridian 19. Vegetable Green 20. Prussian Green	31. Pink Madder Lake 32. Madder Carmine 33. Rose Pink 34. Carmine Lake 35. Carmine Extra Fine 36. Scarlet Lake 37. Saturn Red 38. Pale Vermilion 39. Dark Vermilion 46. Venetian Red 47. Brick Red 48. Terra Cotta
YELLOWS 2. Zinc Yellow	BLUES 21. Light Blue	49. Indian Red 50. Burnt Carmine VARIOUS
3. Lemon Cadmium 4. Light Chrome 5. Light Cadmium 6. Dark Cadmium 7. Naples Yellow 8. Dark Chrome 9. Orange	22. Sky Blue 23. Cobalt Blue 24. Ultramarine 25. Paris Blue 26. Prussian Blue 27. Indigo 28. Delft Blue	1. White 29. Red Violet Lake 30. Blue Violet Lake 57. Light Gray 58. Neutral Tint 59. Payne's Gray 60. Ivory Black

"CASTELL" POLYCHROMOS ASSORTMENTS

These assortments are packed in handsome leatherette boxes

9209.	"Castell"	Assortment	contains	6	pencils		per box	.90
9210.	" Castell"	**	64	12	**		**	1.30
9211.	" Castell"	44	10	18	**		41	2.00
9212.	" Castell"	44	10	24	**		16	2.75
9213.	" Castell"	11	14.	36	68		44	3.60
9214.	"Castell"	**	110	48	110		- 6.6	4.75
9215,	"Castell"	44	-11	60	66	,	11.	6.75

A. W. FABER'S

PENCILS FOR WRITING ON GLASS, PORCELAIN, ETC.

O A W PARFE F. Glass China Malal. Sannony

No. 5700.	Blue Pencils, Blue Polished	per dozen,	\$1.50	each	, .15
5701.	White Pencils, White Polished .	n.	1.50	44	.15
5702.	Yellow Pencils, Yellow Polished	- 11	1.50		.15
5703.	Red Pencils, Red Polished .	**	1.50	10	.15
5705.	Blue Pencils, not in Wood	11	1.50	11	.15
5706.	Red Pencil, not in Wood	74	1.50	11.	.15

These new Colored Pencils are made for writing or drawing on smooth, polished surfaces, where other pencils will not write. They are particularly adapted for Glass, Porcelain, Polished Metal, Wood, or Oil Cloth

The writing is not affected by the influences of temperature, and can be easily removed with a piece of cloth

In sharpening these pencils it is advisible to give them a short point.

They are made in four colors, Blue, White, Yellow or Red and polished in colors accordingly. 7 inches long

E. FABER'S "COMMERCE" PENCIL



"Commerce." Hexagon, Natural Polish, Grades Nos. 2, 3, 4,

Rubber inserted Nickel Tip , per dozen, .50 each, .05

EBERHARD FABER'S

NEW COLORED CRAYON ASSORTMENT



No. 663. Box contains 1 dozen Round, Assorted Colored Crayons in Wood, 1/2 dozen boxes in carton . . . each, .60

FROST & ADAMS COMPANY COLORED PENCILS

White	in lar	rge lea	ds, whi	tewood finish	per doz	75	each	- 10
Vermilion Red		CI.	11	41	84	.75	-51	10
Brick Red	100	n.	32.	14	97	.75	9.0	.10
Blue	311	41	18	-	12.	.75	11	.10
Green	46	0.	**	- 11	- 11	-75	11	.10
Yellow	***	310	100	31	**	.75	41	.10

Used largely by Architects, also by Cotton Mills for marking goods

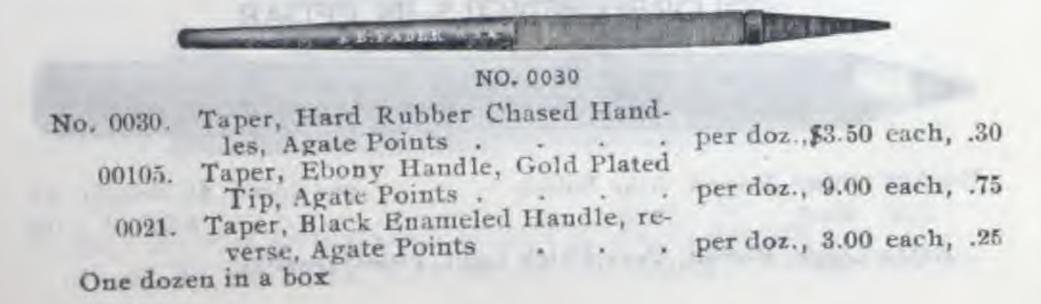
EBERHARD FABER MONGOL DRAWING SET



No. 483. Contains ½ dozen of the famous Mongol Pencils, assorted, grades BB, B, HB, H, 2H, 4H, ½ dozen boxes in a carton per box, .35

EBERHARD FABER MONGOL HEXAGON PENCILS

EBERHARD FABER STYLUS



JOHANN FABER'S FINEST SIBERIAN LEAD PENCILS



No. 300 Siberian per dozen, \$1.00, each, .10

Hexagon, Natural Polish, in fourteen degrees, 6B, 5B, 4B, 3B, 2B, B, HB, F, H, 2H, 3H, 4H, 5H, 6H

All Johann Faber's Genuine Siberian Lead Pencils are stamped in Gold on one side; "Johann Faber's Siberian Lead Pencil," and on reverse side; "Warranted to contain Siberian Graphite," and Degree and Trade Mark

JOHANN FABER'S SILVER STAMP LEAD PENCILS



No. 235. Hexagon per dozen, .50 each, .05
Natural Polish, rubber tip. In two degrees, Nos. 2 and 3

JOHANN FABER'S COLORED PENCILS IN CEDAR



No. 512. Blue, Round, Blue Polish . . per dozen, \$1.50 each, .15 513. Red, " Red " . . . " 1.50 " .15

Extra Large, Round, Very Thick Lead, Finest Quality

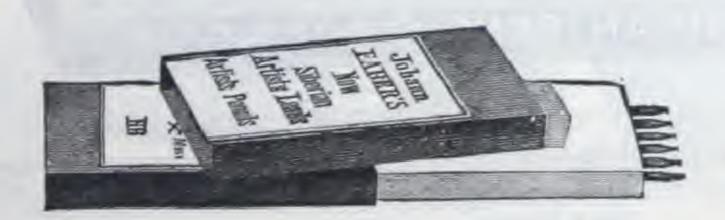
JOHANN FABER'S ARTISTS' TUBULAR PENCILS

With Movable Leads



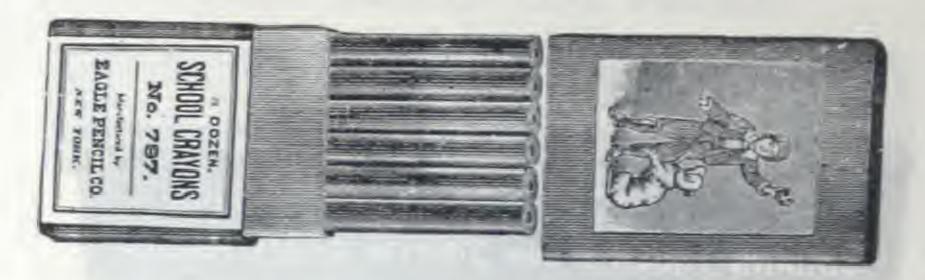
No. 702. Siberian Artists' Pencils, natural polished, 14
degrees, 6B, 5B, 4B, 3B, 2B, B, HB, F, H, 2H, 3H, 4H,
5H, 6H per doz., \$2.50 each, .20

JOHANN FABER'S LEADS FOR ARTISTS' PENCILS



No. 801. Siberian Artists' Leads, 6 leads in box, 14 degrees, 6B, 4B, 3B, 2B, B, HB, F, H, 2H, 3H, 4H, 5H, 6H . per box, .50

COLORED SCHOOL PENCILS IN BOXES



SUPERFINE CRAYON ASSORTMENT NO. 116

One Dozen in a Box with Glass Cover



No. 116. Box of 12 Crayons, Assorted Colors, Round, Glass Finish, polished in corresponding shades . . . per box, .60

Black
Carmine
Dark Brown
Dark Green
Dark Blue
Dark Blue
Light Brown
Rose
Sea Green
Sky Blue
Yellow

VENUS DRAWING PENCILS



STYLE OF PACKAGE

17 Grades, 6B Softest to 9H Hardest

H Hard for Sketching

2H Harder for Outlines

3H Very hard for Architects

H Extra hard for Engineers

5H Extra hard for Draughtsmen

6H Extra extra hard for Draughts-

men

7H Still harder

8H A shade harder than 7H

9H Exceptionally hard, for fine line work

per doz., \$1.00 each, .10

6B Extra soft and very black, double thick lead for large bold Pencil Drawing

5B Extra soft and very black

4B Very soft and very black

3B Soft and very black

2B Soft and black

B Black for shading

HB Medium hard and black for ordinary Drawing or Writing

F Firm for Fine Drawing

Contain the smoothest and longest lasting lead ever produced A grade for every purpose of the Business or Professional Man

VENUS COPYING PENCIL

165 VENUS COPYING

AMERICAN



STYLE OF PACKAGE

No. 165. Venus Copying Pencil, purple, gloss

per doz., .75 each, .07

EAGLE COLORED PENCILS



No. 787. One dozen Pencils, Assorted Colors, tied in bundle, ½ gross in a box . . . per doz., .50 each, .05

Commercial Colors: Blue, Brown, Green, Red, Yellow. For marking and checking. Smooth in writing and marking and durable in point

EAGLE INSERTED RUBBER HEAD PENCILS



No. 402. No. 2 Hexagon, Maroon Gold per doz., \$1.00 each, .10 403.

These Pencils contain about one inch of the best erasive rubber, which being encased in wood is perfectly protected against being soiled, and may be sharpened to a point for erasing fine lines

EAGLE ORLOFF DRAWING PENCILS

BBBBBB-Extremely Soft F . . . Medium

BBBBB. Extra Soft and Extra Black H . . . Medium Hard BBBB . Very Soft and Very Black HH . . . Hard and Black

BBB . . Very Soft and Black HHH . . Hard

BB . . Soft and Black HHHH . Very Hard

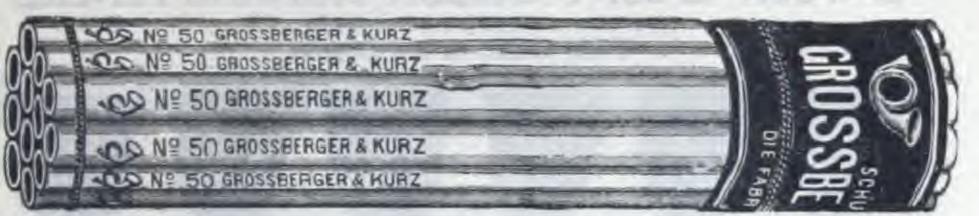
B. . . Black and Medium Soft HHHHHH Extra Hard

HB . Medium Soft HHHHHH-Extremely Hard and Firm

EAGLE ATLANTIC PENCILS

Atlantic, plain cedar, rubber inserted . per gro., \$1.50 per doz. .16

GROSSBERGER & KURZ COLORED PENCILS



	The state of the s	Lead,	in Whitewood	Finish		per	doz.,	.50	each,	.05
683.	Red	11	41	4.1			1.6	.50	6.6	.05
697.	Blue		16	11			16	.50	11	.05
721.	Yellow		116	111			44	.50	6.6	.05
725.	Green	44	44	51			10	.50	- 66	.05
731.	Black	44.	4.6	1.6			44	.50	6.6	.05
32.	Black	X4.	in black polishe	ed wood	10	1	11	1.00		.10
Used la	argely b	v Cott	on Mills for ma	arking o	700	10				245

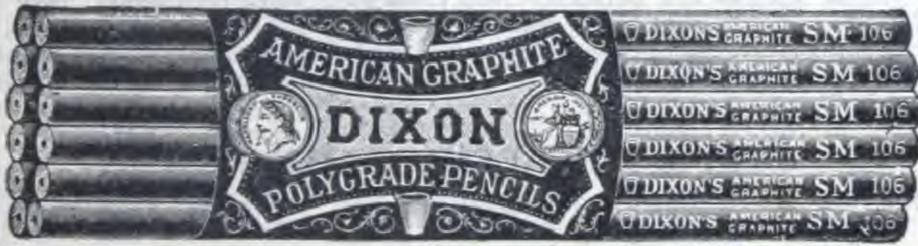
DIXON'S GRAPHITE SKETCHING CRAYON

T DIXON'S AMERICAN SKETCHINGCRAYON 341

Made in round shape only, in the finest Cedar finish, and stamped in gold . per doz., \$1.00 each, .10

DIXON'S FINE ROUND PENCILS

No. 341.

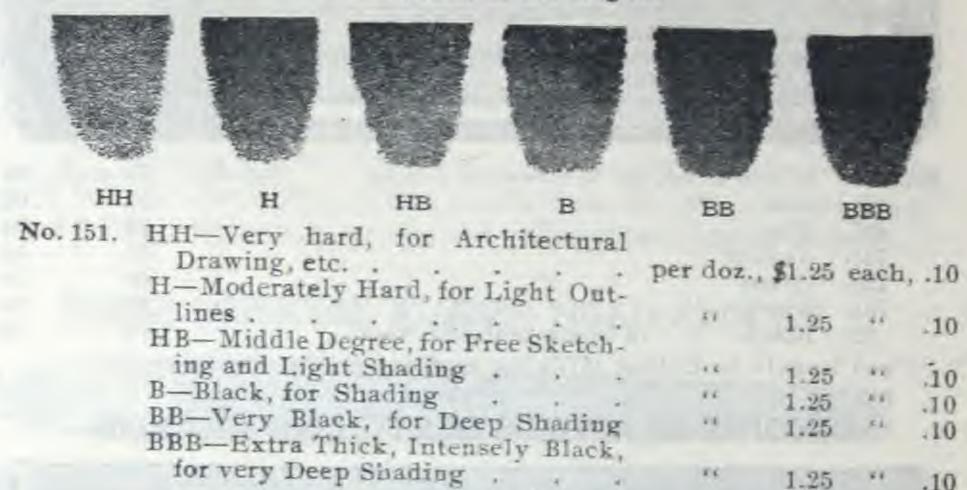


No. 141.		*	S	No. 143.		M	No. 144.		H
142.		-	SM	1431/2.	*	MH	145.		VH
1421/2.	*		MB						
No. 151.			S	No. 1521/2.		MB	No. 154.	-	H
1511/2-			SB			M	155.		VH
152.		PICT	SM	15334.	-	MH			

S-Soft SB-Soft Black SM-Soft Medium MB-Medium Black M-Medium MH-Med.Hard H-Hard VH-Very Hard

E. WOLFF & SON'S CARBON DRAWING PENCILS

Plain Cedar, in Six Degrees



E. W. & S. PERMANENT BLACK CHALK PENCILS

No. 150.	Total Process to the Control of the		per doz.,	\$1.25	each,	.10
	HB-Middle Tint	-	41	1,25	11	.10
	N-Neutral Tint, for distances .	-	44	1.25	11.	.10

These Chalks are perfectly free from grit, work pleasantly, have an intense and brilliant black color in the RB, and great delicacy of tint in the other degrees. Drawings executed with these Pencils do not require fixing, and may be carried in a portfolio without fear of their being rubbed

E. W. & S. ACADEMY CHALK PENCILS

No. 152.			Natural	Polished	per doz.,			.10
		Medium,	Brown	44	11	1.25	4.6	.10
	 3.	Soft,	Soft	4.6	4.6	1.25	Tr.	

These Pencils are especially suited to the use of Students for the purpose of copying Lithographic Studies, sketching from Nature, and Model Drawing. In tone, quality, and correctness of degree, the Academy Chalk Pencil will be found superior to the Conté Chalks

E. W. & S. INDELIBLE SOLID INK PENCILS

Finest Quality, in Plain Cedar

No. 116.	Indelible Black Lead Indelible Blue Lead	. 0	,	+	8	per doz., \$1.25 each, .10
	radeliote pine Tead	19.1		+	1	1.25

BLAISDELL PAPER PENCILS

For Marking on China, Glass, Etc.

163 BLAISDELL 'S . CHINA - MARKING PAT. " 27.16"

- mmm4



No. 163. China-Marking Pencil . . . per doz., \$1.25 each, .10

Wrapped in Black Paper. 7 inches long. Gilt stamp. Black finish, highly polished. 1 dozen in box, ½ gross in carton

No. 163 is the only pencil made that will satisfactorily write on China, Glass, Celluloid, Polished Metals and other articles of similar character. The same economy exists in their use as in all our pencils, as these have the same method of sharpening

This number is now used largely by China Decorators, and for other purposes where marking on smooth surfaces is required. They do not scratch or mar the finest surface, and the marks may be removed with out leaving the slightest trace

BLAISDELL COLORED CRAYON PENCILS

BLAISDELL SENSIL CO. PATE 10 37 11: 151

0.151.	Blue,	Blue	Finish			10	per doz.,	\$1.00	each,	.10
152.	Black,	Black	Finish				14	1.00	44	.10
153.	Green,	Green	Finish	4			6.6	1.00	44	.10
154.	Yellow,	Yellow	Finish			4	X1	1.00	3.0	.10
155.	Brown,	Brown	Finish				3.6	1.00	61	.10
156.	White,	White	Finish				6.6	1.00	131	.10
161.	Red,	Red	Finish	100				1.10	3.6	.10
162.	Pink,	Black	Finish		100		44	1.10	4.6	.10
167.	Purple,	Purple	Finish	l V	4		24	1.10	**	.10

Wrapped in Parchment Paper. 7 inches long. Silver stamp. 1 dozen in box, ½ gross in carton

Blaisdell Colored Crayons stand pre-eminent. This has been established by their superior quality, the economy and cleanliness in their use, and the many other points of advantage which they possess over crayons encased in wood.

The sharpening or exposing a new point is very quickly accomplished by cutting one thickness of paper between the perforations and removing the narrow strip, thus saving the time, the waste and the dirt usually caused by whittling the point

None of the lead is cut away, and the consumer is thus enabled to use the entire crayon

THE ECONOMY PENCIL HOLDER

Companion to the Fountain Pen





Length of Barrel 4 inches

The Economy Pencil Holder . . . per doz., \$1.80 each, .15 with Safety Clip 3.00 .25

The above cut shows our New Economy Pencil Holder, the simplest and most effective article of the kind ever offered. It is made wholly of hard rubber—fountain pen stock—Each holder is hand turned and hand-somely chased.

The clutches that secure the pencil and erasive tip are both made of hard rubber. The pencil clutch will accommodate either hexagon or round pencils of varying sizes and is reversible so that the point may be protected or a double pointed pencil used.



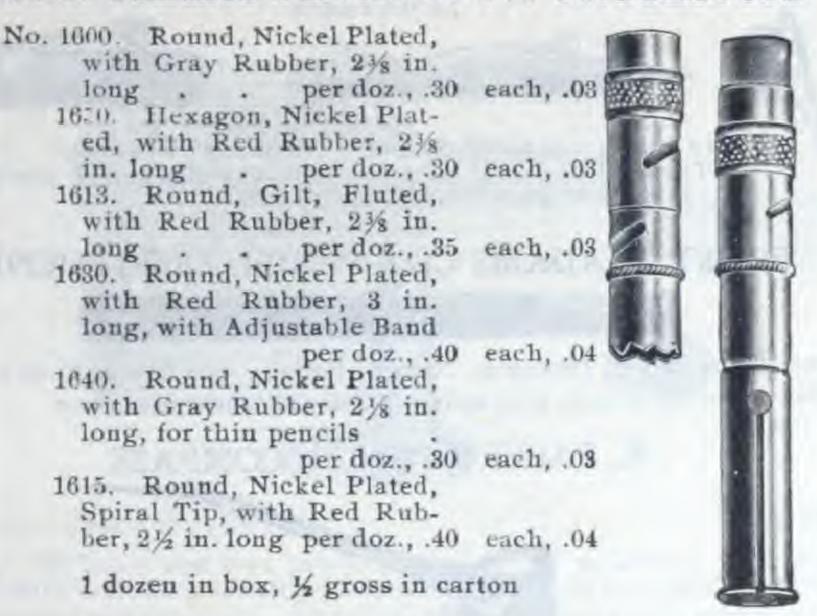
The eraser clutch is made to take a standard size erasive tip—which can be used down to small proportions and then renewed.

This holder makes possible the use of the pencil down to the last 34 inch, a saving of nearly 40% to the average user. In addition to its saving features The Economy is as attractive in appearance as a fine fountain pen and affords the user a pleasing and uniform pencil service

Each holder is fitted with pencil and good erasive tip

The Economy appeals to every business man, and particularly to architects, draughtsmen, stenographers, expressmen, conductors, clerks, trainmen, students and in fact any one who has occasion to use or carry a lead pencil

EBERHARD FABER'S PENCIL POINT PROTECTORS



EAGLE PENCIL PROTECTORS

With Rubber Erasers



NO. 562

No. 562. Pilot Protector with Clasp Eraser, one gross in box per gross, \$5.00 per dozen, .50 each, .05

KOH-I-NOOR NICKEL PROTECTORS



NO. 563

No. 563. Koh-i-noor Protectors with Slide Catch
per gross, \$5.00 per dozen, .50 each, .05

THE NEW "MODERN B" PEN AND PENCIL CLIPS

ADJUSTABLE





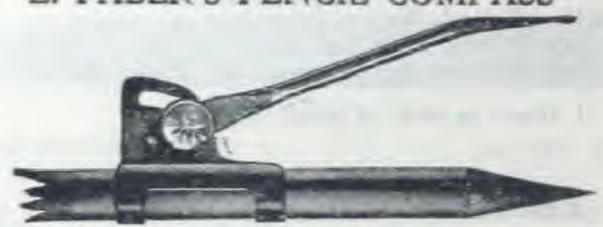
Pen and Pencil Clips, 2 sizes per gro., \$7.20 per doz., .50 ca., .05 These Clips can be adjusted to fit any size cap or pencil. Put up 3 dozen in a handsome display box

FROST & ADAMS CO'S PENCIL LENGTHENER

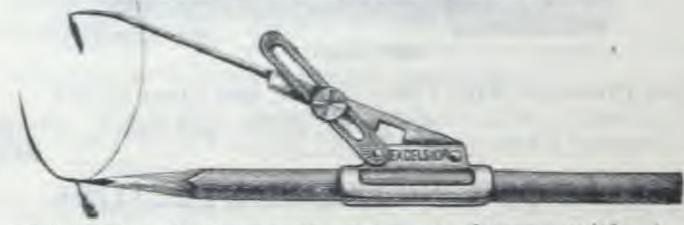


Pencil Lengthener, Hexagon, Natural Polish per dozen, \$1.00 each, .12 Saves the short ends that otherwise would be thrown away

E. FABER'S PENCIL COMPASS

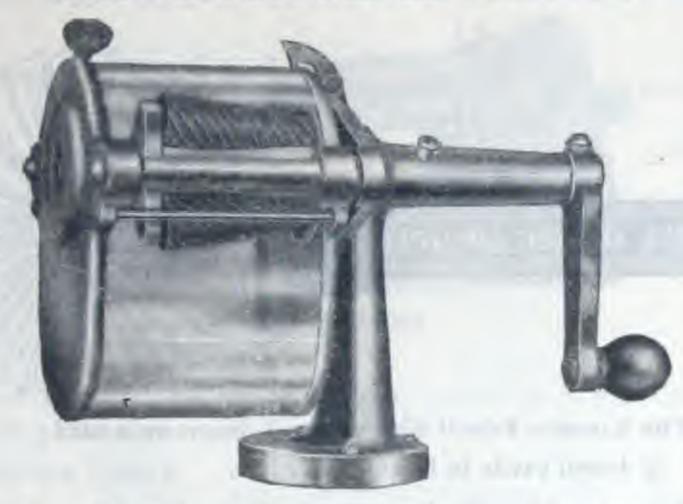


EXCELSIOR PENCIL COMPASS



Better and more durable than others. The solid steel leg and arm with clamp screw, makes them very strong and steady

THE BOSTON PENCIL POINTER

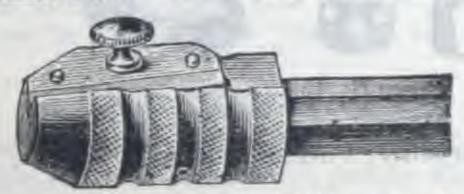


The Boston Pencil Pointer

each, \$6.50

This is the latest and best pencil sharpener yet produced. It is made of steel with celluloid shavings collector which can be readily detached for emptying and cleaning. No knives to dull, it has a mill grind, needs no adjustment; sharpens any pencil. It will out-wear any sharpener made, and you cannot break the points in sharpening the pencil (Guaranteed to stay sharp one year)

"EXCELSIOR" PENCIL SHARPENER



THE KOSMOS PENCIL SHARPENER



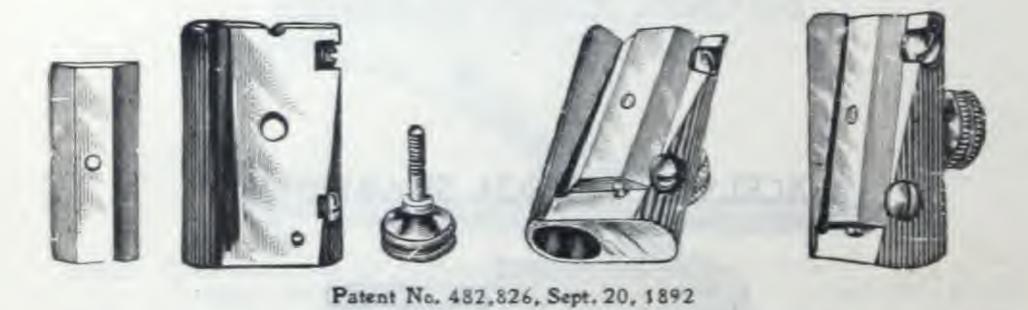
No. 1000. The Kosmos Pencil Sharpener, 1 dozen on a card,

1/2 dozen cards in box each, .15

The best fifteen cent pencil sharpener in the market

NEW ACME PENCIL SHARPENER

Double Edged Reversible Blade. Combines Simplicity with Perfection



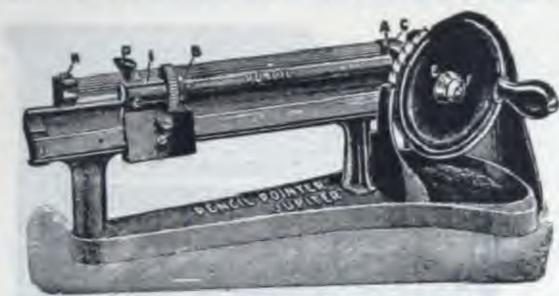
No. 1001. Acme Sharpener, 1 dozen in box . . . each, .25

EXTRA BLADES FOR ACME PENCIL SHARPENERS

No. 1002. Double Edge, 2 in small box each, .10

THE "JUPITER" PENCIL POINTING MACHINE

U. S. NOV. 2, 1897 PATENT NO. 593,093



FRONT VIEW

PATENTED
IN ALL
COUNTRIES

Any part of the "Jupiter" Machine that may become broken, can be obtained, separately, at small cost. Pattern D Machine is especially adapted for sharpening Colored Chalk Pencils

The "Jupiter" is the only practical machine for sharpening pencils, ever offered to the trade and public. It is constructed on scientific principles, and it will do all that is claimed for it. A child can operate it equally as well as an adult

The "Jupiter" Machine will sharpen any shape of pencil, short or long, thick or thin, round or angular, and as it collects its own shavings and graphite chips, the pencil is sharpened without soiling the hands, table or floor

With ordinary care, the "Jupiter" Machine will last a lifetime, and as the cutting-wheels are made of the best quality steel, they do not often require sharpening. The cutting-wheel is made reversible, so that when one side becomes dull, the other side may be used, after which a new cutting-wheel can be supplied, or the old one sharpened, at small expense

DIRECTIONS FOR USING

Place the pencil into the two receiving holes A and B (the end to be pointed, into hole A) then press down gently with the thumb of your left hand on lever D, while you turn the cutting-wheel rapidly with your right hand. A little practice will enable you to cut to a very fine point, for drawing, or to a medium point, for ordinary writing

AMERICAN SCHOOL CRAYONS FOR BLACKBOARDS





ONE COLOR IN EACH BOX

HARD DUSTLESS CRAYON, WHITE

Hygeia Hard Dustless Crayons . per gross, .40 Packed in one gross wooden boxes

Dustless Crayon is as near perfect as can be made and is entirely free from all greasy substances or grit, makes a clean white mark and is as free from dust as a proper bite upon the blackboard will allow. It lasts longer than the ordinary chalk crayons and is in every way free from the objections made to the so-called dustless crayons heretofore put upon the market

SOLID COLORED CHALK CRAYONS

Black .		per gross,	\$1.20	Light Pink		per gross,	.75
Buff .	10	16	.75	Light Rose	-	16	.80
	7	44	2.20	Light Yellow		44	1.00
Crimson .		11	1.00	Magenta .		22	1.50
Dark Blue	1	- 11	1.25	Medium Blue		- 0	.90
Dark Green		-14	.75	Medium Green		5.0	1.10
Dark Pink	. 60	50W	.65	Medium Yellov		1.0	1.00
Dark Red						5.61	.85
Dark Vellow			1.00	Purple .	*	110	2.20
Extra Light	Green	116	.75	Scarlet .		44.	1.00
Gray .			.75	Ultramarine Bl	ue	18.	
Light Blue	-		.80	Umber .	*	- 10	.85
Light Green		11.	1.00	White .	10	100	.25
Ass	orted	Colors, in b	xoc	pe	rgre	oss, .85	

LECTURERS' SMALL CRAYONS

White	14×14×3	inche	5 .		100				per do	z., .20
Assorted Colors,	()	11					+	- 2	11	.40
Crimson	10	-11			12.			4	16	.65
Scarlet	11	X85	0	9	110	6			9.6	.65

Especially adapted for Caricaturists, Blackboard Illustrators, etc.

Black	Full Flesh	Medium Yellow
Crimson	Light Blue	Purple
Dark Blue	Light Green	Scarlet
Dark Green	Light Yellow	Umber
Dark Red	Magenta	Ultramarine Blue
Dark Yellow	Medium Blue	
Flesh	Medium Green	

LECTURERS' LARGE CRAYONS

CHARLEST EDITION AND LANGUES AND STREET

White	1×1×3	inches	M, K	19		4	9.	. 1	per do	z., .50
Assorted Colors,	11.	Harry	U17 I	die.					- 66	1.25
Scarlet	feetu	ruent mi	Mil	() (4)	308	60			93	1.80
Crimson	-11	16	1					19	4.6	1.80
Black	1	Flesh				M	lediu	m Ye	11ow	
Crimson	- 10	Light B	lue			P	urple	e		
Dark Blue		Light C	Freen			S	carle	t		
Dark Green	15	Light Y	Tello	V.		U	Itrat	narin	e Blue	2
Dark Red		Magen	ta			U	mbe	r		
Dark Yellow	1	Mediu	m Blu	ie						
Dull Flesh	0	Mediu	m Gr	een		4				

FRANKLIN'S DRAWING CRAYONS



No. 72½. "Rainbow," 14 Colors . per dozen, \$1.20 each, .10

The Prism Colors are Yellow, Orange, Red, Violet, Green and Blue, with an Indigo shade produced by blending the Blue and Red

Made of fine materials, as bright, clear colors as are contained in the highest grade lead pencils and will do good practical work

FRANKLIN'S EDUCATIONAL DRAWING CRAYONS



No. 74.	10 5	Stand	lard	Col	ors i	n flat	box		per dozen,	\$1,20	each,	.10
75.	12 (Color	s like	e No	. 73	"Ra	dian	t''	14	1.40	X.C	.13
751/2	14	11	1/2 i	nch	long	ger			**	1.50	11	.15
76.	15		in F	lox				,	115	1.50	11	.15

FRANKLIN'S DRAWING CRAYONS



No. 120. "Rainbow" Colors in round wood box, with fancy label, 7 Colors per dozen, .60 each, .05

Made of the finest Materials, the best and brightest colors. Noted for smooth and uniform quality

FRANKLIN DRAWING CRAYONS



No. 112x. "Radiant" Colors, 2½ inches long, 3 diameter, round wood box, fancy label, paper wrapped, 14

Colors per dozen, 60 each, .05

The Colors are scientifically correct, and extra bright and lasting

FRANKLIN'S LUMBER CRAYONS

FRANKLIN'S LUMBER CRAYON:

STYLE E, No. 1. Hexagon, 's inch Diameter, 4 | inches Long

FRANKLIN'S LUMBER CRAYON. VEST POCKET SIZE.

STYLE F. Round

No. 24. Black . per dozen, 50 No. 26. Light Red per dozen, 65

FRANKLIN'S LUMBER CRAYON. MAKES A WATERPROOF MARK.

STYLE E, No. 2. Hexagon

FRANKLIN'S OIL SHIPPING CRAYON. STYLE A. BLACK, BLUE, RED.

STYLE A. Round

No. 40. Black . per dozen, 60 | No. 22. Red . . . per dozen, .75

FRANKLIN'S OIL CRAYON

STYLE B. Round

New Era, Five Colors . . . per dozen, .50

FRANKLIN'S OIL CHECKING CRAYON

FRONKLING OIL CHECKING ORAYON - STILL C.

STYLE C

Franklin's Oil Checking Crayon, 7 colors, Black, Blue, Red,
Green, Brown, Purple, Yellow . . . per doz., .50

FROST & ADAMS CO.'S LUMBER CRAYONS

LUMBERMAN'S RED CRAYON.

Red Lumber Crayons, Square, 1/2 in. x 1/2 in. x 3 /8 in. long per doz., .75

DIXON'S LUMBER PENCILS

Nº 361 JAPANNED HEXAGON LUMBER PENCIL.

No. 361.	Hexagon	Lumber	Pencil,	4¾ in.	long	Black p	er doz.,	
496.	"	11	**	10	11	Yellow		1 25
497.	11	11	24	11	11	Terra Cott	a if	1.25
520.		***	11	18	40	Red	44	1.25
521.	16	100	- 10	44	14	Blue	46	1.25
522.	16	-01	1.8	N.C	(1)	Green	**	1.25

RAILROAD CRAYONS

For the Use of Car Inspectors, Warehousemen, Baggagemen and Mechanics

Railroad	Crayons,	size, 51/2 × 1/2 inch	4		per gross, \$2.50
Dustless	11	- 0			.50

For marking on rough surfaces. Foundrymen will find it much more useful and nicer to handle than the old style piece of chalk. It does not soil the hands or clothing. The mark will not wash off in the rain, but can be rubbed off as easy as chalk. The mark is fireproof, making it useful for Blacksmiths or Ironworkers. It will last longer than any substance used for marking, and being the most durable it is actually the cheapest for rough work. We furnish samples and price, free to railroads and large shops.

DIXON'S BEST COLORED CRAYON PENCILS

TDIXON'S BEST BLUE 350

No. 320.	Light Blue, hig	thly finish	ed, round 7 in.		per der	., \$1.00	each.	.10
321.	Lake Red,	10	11		4.6	1 00	12	.10
322.	Pink,	16	- 16		4.4	1.00	15	.10
323.	Violet,	9.5	16.		14	1.00	12	.10
324.	Orange,	11	11		- EC	1.00	16	.10
325.	Olive Green,	1.6	36	-	15	1.00	ri.	.10
330.	Indigo Bluc,	4.0	45		11	1.00	11	.10
335.	Sepia,	EE.	41		70	1.00	25	.10
343.	Brown,	11	Ef		11	1.00		.10
349.	Red,	34	46		166	1.00		.10
350.	Blue,	14	11		-11	1.00		.10
351.	Terra Cotta,	11	-18		1.4	1.00	a	.10
353.	Yellow,	12	41		24		10	.10
354.	Green,	11	35		FF	1.00	**	.10

DIXON'S BEST SOLID CRAYONS

786. T DIXON'S BEST BLUE CRAYON.

No. 786.	Best	Blue,	solid round	Cray	on	per doz.,	\$1.00	each,	.10
380.	1.6	Terra Cotta	111	XI		81	1.00	44	.10
382.	14.	Green,	11	122		-13	1.00	44	.10
384.	36	Black,	14	93.		1.6	1.00	88	.10
385.	166	Yellow,	3.6	93.	4	16	1.00	**	.10
386.	11	Red,	74	4.0		84	1.00	47	.10
387.	16	Brown,	(C	116		11	1.00	- 11	.10
1500.	14	Violet,	66	-64		440	1.00	**	.10
1501.	3.6	Pink,	**	4.5	-	13	1.00	51	.10
1502.	166	Orange,	XX	X4		4611	1.00	×1	.10
1503.	76	Sepia,	iik.	47		1.6.	1 00	9.6	.10

Not covered with wood, but solid round leads 16 inch diameter, paper covered. I dozen in box and 6 boxes in carton

FRANKLIN'S TIMBER CRAYON

FRANKLIN'S VENETIAN CRAYON STYLE G.

Style G. Red Venetian Timber Crayon . . . per doz., 50

For marking on logs, timber, surveyor's stakes, stone, marble, etc. Oganic color. Will not fade

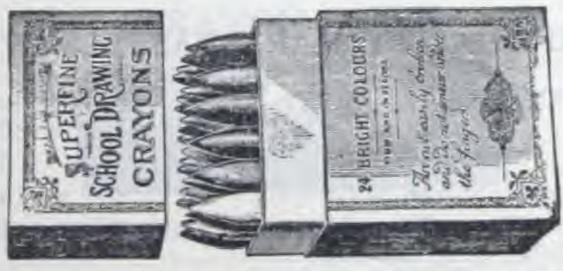
TRIANGULAR MARKING CRAYONS

× JOHANN FABER

No. 353. Triangular, 34 inch

. Blue and Red per doz., .40

"RAPHAEL" FRENCH COLORED DRAWING CRAYONS



Large Pastel	Wax	Cravons	5 in	box	Que		per doz. boxes	.60	each,	.05
Targe Taster	11. 11.11	11	6	11			"	.75		.10
16			12	14		-	- 0	1,50	1.6	.15
16	4	ii	18	**			£1.	2.25		.20
**			94	44		-	n	3.00	16	.25

LEFRANC'S FIRST QUALITY HARD PASTELS IN BOXES



ASSORTED COLORS

Round Bo	xes containi	ng 6 C	rayous	-	per dozen, \$1.80 per box,				
14	11	18	111		.11	2.40		.30	
- 13	1.0	18	39		64	3.60	X4	.40	
6.0	42	24	4.0		11	4.80	76	.50	
10	96	30	16	-	- 155	6.60	- 64	.60	
- 11	4.6	36	14	15.	10	8.40	14.	.80	
0.0	- 44	48	YA		1.6	12.00	66	1.10	

SECOND QUALITY HARD PASTELS IN BOXES

Round Boxe	s containing	6	Crayons		per dozen,	.60	per box,	.10
1.8	0	12	84		U.	1.20	1.4	.20
2.6	34.	18	14-	4	16-	2.40		.25
4.6	44	24	.06		781	3.60	111	.35
£1.	+6	30	7.6	-	11	4.80	4.6	.40

CHAMOIS PALETTES

Oblong-for Crayon Work

No. 1.	Size	4 ×6	in.	each.	.20	No. 4.	Size	4 ×6	in.	folding	each, .40
2.	110	414×816	40.		,25	5.	61	41/4×83	4 11	11	11 .45
3.	(1)	51/4×8	K1	11	.30	6.		51/4×83		11	.50

MATERIALS FOR CRAYON AND CHARCOAL DRAWING



Conte's	Square Black	Crayons,	No. 1, hard per 2, medium	gross,	\$1.60 per 1.60	doz.,	.18
4.6	11	311	3, soft	11	1.60	16	.18
100	Square White		1, 2 or 3	11	1.60	4.6	.18
11	Round Black		Varnished	1.6	4.50	55	.42
24	Square Red	11		48	1.60	11	.18

CRAYON SAUCE



Conte's Velvet Sauce Crayons, wrapped in Foil, in boxes of
14 gross per gross, \$8.00 per dozen, .60
Contè's Velvet Sauce Crayons, large
Philadelphia Sauce Crayons, wrapped in Foil, in boxes of
1/2 gross per gross, \$6.00 per dozen, .60
Perfection Sauce Crayons, in Vials, soft and transparent;
give a rich gray tone per dozen, \$1.00 each, .10
"Peerless" Crayon Sauce, in Vials; superior " 8.00 " .25

WINSOR & NEWTON'S

COMPRESSED PREPARED RUSSIAN CHARCOAL



ONE DOZEN STICKS TO A BOX

No. 00.	The softest and darkest shade	14.		per box	.75	stick	07
0.	Soft like 00, but of a lighter	shad	le.	******			
	(The No. 0 grade is more						
	rubbed out than any of the	oth	er				
	grades)	*	*	110	.75	11.	.07
1.	Not so soft as Nos. 00 and 0, and	leve	en				
	lighter in shade than No. 2			Tr.	.75	te	.07
2.	Harder but darker than No. 1			11	.75	11	.07
3.	Harder and lighter in shade than	No.	2	11	.75	16	.07
4.	Harder and lighter in shade than	No.	3	14	.75	n	.07
5.	Harder and lighter in shade than	No.	4		.75	186	.07

Smooth, even grain Compressed Charcoal Sticks, much superior to the French Charcoal. Will wear longer and give better results

FRENCH CHARCOAL IN BOXES



Ordinary, 50 sticks in box								per	box,	.25
Conté's Venetian, 50 sticks	in	box	181				6.1	50	11	.50
Extra large, 8 inches long,	3/8	inch t	hick	50	10				ii	.50
" 8 "	1/2	11			1				11	.75
Rouget's Extra Fine, Nos.	1, 3	2 and	3, 25	stic	ks in	box			(ir	.50
Berville Charcoal, 50 sticks	s in	box,	hard		Y.W	O'N.			11	.50
P. A. Extra Venetian Char	coa	1, 50 s	ticks	to t	ox, e	xtra	hard	,		
the finest selected char	coa	1 ever	offer	ed						.50

CONTÉ'S CRAYON PENCILS

In Polished Cedar

Conté's	Black	Crayon	Pencils,	No.	1,	hard	1		- 1	er gross,	\$6.50	each,	.08	
		45	46	12	2,	med	ium			**	6.50	.00	.08	
**		**	16.	11	0,	extra	fine,	very	har	d "	10.00	ir	.10	
***		4.9	ii.	**	1,		(hard			10.00	-10	.10	
**			12	4.4	2,			med	inın	**	10.00	10	.10	
***		4.6	14	¥1,1	3,		e -	soft		190	10.00	10	.10	
- 44		11	16	Vel	vet	, Ve	lours			- 97	13.50	u.	.10	
**	White	Crayon	- 11						. "	46	6.50	**	.08	
44	Lithog	graphic	Crayon I	Peuc	ils,	, No:	s. 1, 2	and	3		10.80	0	.10	

"HANDY" PALETTE CHALK BOX

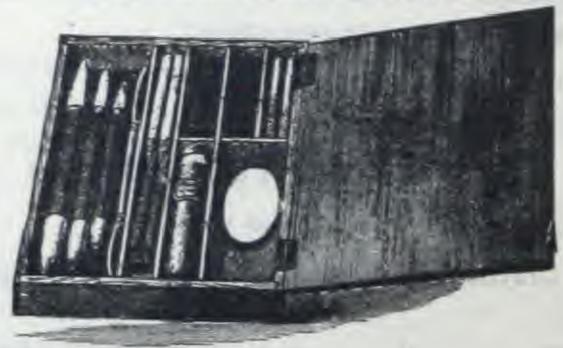


Fitted Complete each, .60

The Box contains Conté square Black Crayons, White Crayons, one Bottle Velour Sauce, Paper Stumps, Leather Stumps, White and Gray Tortillon Stumps and Brass Portcrayon. The lid is covered inside with Chamois Leather for stumping, arranged to be used for a Palette

NEW PALETTE CHALK BOX

For Students, Schools of Art, Etc.



Fitted Complete each, \$1.25

The Box contains 4 each Nos. 1, 2 and 3 Square Black Conté Crayons, 2 each Nos. 1 and 2 Lemoine's Round White Crayons, 1 Bottle Stumping Chalk (Velour Sauce), 1 each Nos. 4 and 6 White Paper Stumps, 1 No. 2 White Leather Stump, 4 White and 4 Gray Tortillon Stumps, 1 Brass Porterayon. Weight, under 8 ounces; or about the same as an ordinary 12-inch Mahogany Palette. The lid is covered inside with Chamois Leather for Stumping, and the thumb-hole so arranged that the Box may be held as comfortably as a Palette

LEFRANC'S SOFT FRENCH PASTELS



0.1.	Contains	26	First	Quality	Pastels,	assorte	d	4	per box	
2.	14	42		11	44	- 44			- 11	1.10
3	16.6	56		**	1.0	66	-		- 11	2.00
4	44	62		11	14	6.0				2.70
5.	4.5	129		11	(1)	44		4	15	4.50
6.	**	156		46	4.6	44		16	**	5.50
	and extr					n .	4.	3	\$8.00 to	
eparat	te Pastels	, ac	cordi	ng to co	or .	* .	1.		stick, .06	10 .50
ox of	26 Paste	ls, c	ontai	ning an	assortm	ent of	eithe	r Bl	ue,	** **
Br	own, Gra	y, C	reen	, Yellow	, etc.,		*	4	per box	, \$1.50

GIRAULT'S EXTRA SOFT FRENCH PASTELS

		200	10000	C. L. C. W. C. C.											
o	6.	28 F	astels,	White	p	er bex	.60	N	0.6.	28	Pastels,		shades	box,	.60
-		28	**	Black		44	.60		6.	28	(t	Ochre	4.4	11	.60
			111		had	0516	.60		6.	28	160	Violet	46	1.6	.60
		28	1 44	Em Green		111	.60		6.	28	14	Warm Gr	5V 15	1.6	.60
		28	150			100	.60		6.	20	-64	Yellow	1 11	1.0	.60
		28		Flesh Tint	16	10		1	2.40	28	44	Brown	116	160	60
		28	44	Gray	16.	11	.60	1	6.		66	Asst. Co.	lors is	4.4	.60
	6.	28	44	Green	**		.60	1 .	0.	28		H321. UU.	1012		100
In	. 6.	28	Pastels	, Purple	e, 8	asst.	sha	des	1.5		9.	4	per b	ox,	.75
,	0.	28	- (1	Red			66 -								,75
	6.	28	4.6	Rose			-66		- 60			WHI.	1.0		.75
	700		-	Vermi	lic	171	11					1	1.3		1.00
	6.	28		Quart	210	cian	Acr	ort	ed C	olo	rs		19		1.00
	ā.			Quart	er	Size	, As	2011	11	010	with	carmi	ne i		1.50
	4.								110		WILL	Carmii	1	2 111	2.25
	3.	64	-61	Half s	\$1Z	e	-	-	M			*	- Y	-	3.00
	6.	28	10	Eight	h	size,	, Car	11111	ne, as	sst.	shades	4			
	21	4 88	14.	Three	Q q	nart	er si	ze,	Ass	orte	ed Colo	rs	3	-	3.25
	3	132	9.4	Full s	size	e. A	ssort	ed	Colo	rs .					4.00
	1	164		Doub					-6.6						6.00
	4.			Donis	14	4111			-116					¥	8.00
	0.	272			11				18.6			1371		1.	12.00
	00.	390													

FROST & ADAMS CO'S FINE BACKGROUND PASTELS

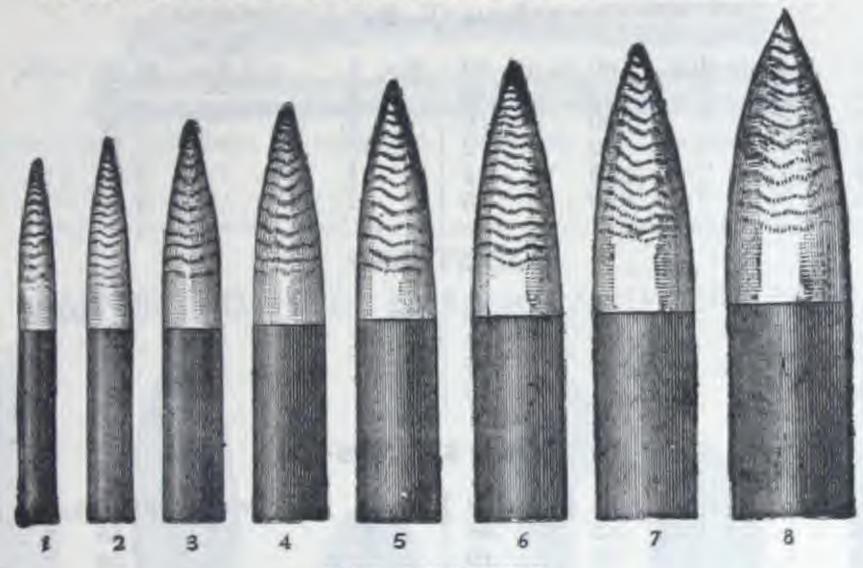


Large, Square Sticl				, cac	h25
Apple Greens Nos Beaver	. 430 to 4351	Bellinite	Gobelin Greens	190 to 194	inclusive
	440 " 445	14	Golden Browns Nos	s. 450 " 455	14.
Black, Blue Black,			Greenish Grays	310 " 315	11
White, Grays Nos	. 1 to 12	3.8	Grayish Blues	210 " 215	
Blue Grays		4.6	Light Olives	360 1 365	
Bronze Greens	410 '' 415	17	Old Golds	260 " 262	0.6
Cadet Blues	280 . 285	15	Old Roses	460 ** 465	24
Castor Drabs	290 11 295	AX.	Olive Greens	390 " 395	47
Dark Browns	265 " 269	16	Peacock Blues	160 " 165	44
Dark Olives	420 " 425	14	Peacock Greens	170 175	**
Dark Cadet Blues	400 " 405	44	Plums	223 " 225	4.8
Dark Olive Browns	300 11 305	188	Red Browns	350 " 355	
Dark Crimsons	220 " 222	11	Sage Greens	100000	110
Dead Nile Greens	340 " 345	116	Sky Blues	270 " 275	14
Dregs of Wine	285 " 250	44	Snuff Browns	150 " 155	**
Flesh Pinks	135 " 140	4.0		263 11 265	411
Gobelin Blues	380 " 385	37.	Ultramarine Blues	200 " 205	
TO DESCRIPTION OF THE PARTY OF	000	1	Wood Browns	320 " 331	35

The following are odd shades not running in lines and only 1 or 2 shades of each

Army Blue Canary Dark Blue Purple Dark Buff Dark Peacock Green Gold Ochre Light Buff Light Gobelin Green		No. 1006 1016 1016 1007 1002 1009 1006 1015	Lilacs Medium Red Pr Medium Olive (Naples Vellow Olive Drab Very Dark Beav Very Dark Blue	Green	1014 1017 1001 1008 1011 1005 1004
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FRENCH STUMPS, FOR CRAYON SHADING

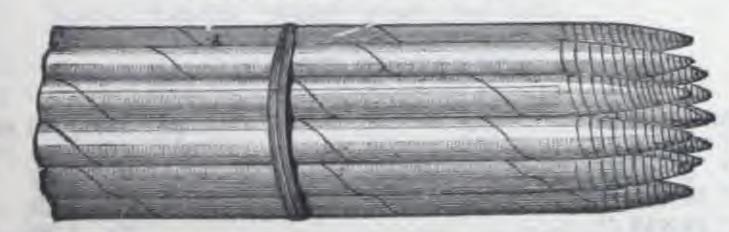


RED LEATHER

		1 1 2 2 2 2						
per doz.,	.55	each.	.05	No. 5.	per doz.,	\$1.10	each,	.10
E in	.65		,06	6.	61	1.35		.12
18	.75	110	.07	7.	66	1.50	16	.15
ec	.85	66	.08	8.	4.6	1.75	4.6	.18
Assorted,	1 to	8 .	100	4.	per doz.,	.95		
		GE	VAS	PAPER	47 8			

	1	GR	AY	PAPER			2 -		
per doz.,	.11	each,	.02	No. 5. 6.	i.	per doz.,	.22 .25	each,	.04
10	.15	10	.03	7.		10	.30	66	.05
11	-20	44	.03	8.		- (1	.35	X.E.	.05
Assorted,	1 to	8 .				per doz., .2	0		

TORTILLON STUMPS



per gro., .55 per doz., .10 | Gray

hite

per gro., .50 per doz., .10

YELLOW LEATHER CHAMOIS STUMPS

Extra Quality

No. 1.		per doz.,	.60	each,	.10	No.	7.	per doz.,	\$1.80	each,	.20
2.		441	-10	7.7	.10		8.		2.00	4.6	.22
3.	*	***	80	1.6	.10		9.	. 11	2.50	1.0	.25
4.		8.8	.90	1.0	.12	1	0.	16	2.75	ice.	
5.		41	1.15	15	.12	1	1	116		**	.28
6.		- 10	1.40	14		3	2		3.00		.30
٥.			1.30		.15	1	2.	**	3.50	14	.35

KID STUMPS

No. 1.		161	+		each, .08	No. 5.				each, .12
2.		*	+	140	.08	6.			2	.12
3.			41	-	.08	7.	4	4		.15
4.	*				.10	8.	10		10	0 15

CORK STUMPS

No. 1.	2	per doz.,	.55	each.	.08	No. 5.		per doz.,	\$1.10	each	10
2.		11	.62	16	.08	6.		11	1.35	Cach,	.12
3.		41	.75	3.6	.10	7.		.92	1.50	11	.15
4.		K.E.	.90	14	.10	8.	1	130	1.75		.17
		Assort	ted.	1 to 8			ner	doz 95			

FOLDING ATOMIZERS

For Spraying Fixatif on Crayon and Charcoal Drawings



Japanned Tin Tube Atomizer . . .

per doz., \$1.50 each, .25

CHAMOIS SKINS

No. 0.	Size 4× 6 in.						norder to		0-
1	" 5× 8 "						per doz., .50	eacn,	.UD
2.	000			*	12.		.70	14	.06
	" 8×12 "	4		14	4		1.40	44	.15
3.	" 10×15 "						" 2 30	11	.25
5.	" 12×19 "				-		11 4.00	11	1000
9.	" 16×24 "		-7.0				100	4.0	.40
**	4045.84					147	7.50	16	.75

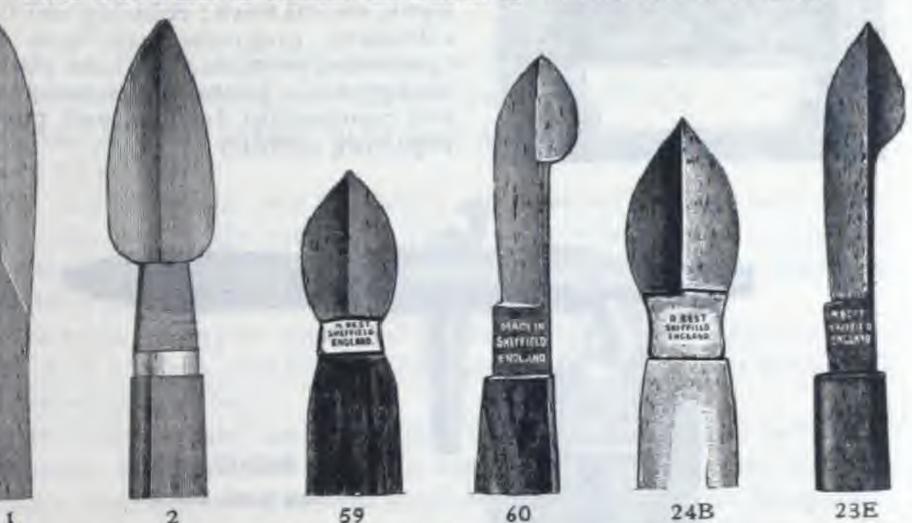
ROST & ADAMS CO.'S PORTE CRAYON HOLDERS



ass, 4 in. per doz., .40 each, .05 | Silvered, 4in. per doz., .50 each, .05

Conté's Brass, with wooden centre . per doz., \$2.40 each, .25

IMPORTED STEEL ERASERS AND SCRAPERS



	1	2		59	60		2	40		23	-
٥.	1.	All Steel	Oil Colo	r Scrap	er, 6 in.					each,	.25
	9	Ebony H	andle. Ste	eel Oil	Color Scra	per.Blad	e 134	in.		1.0	.40
	9	11	0		11	10	156	in.		14	.45
	2	2.6	- 0		16	- 18	17/8	or 2	in.	1.6	.50
	2.	9.0	177		44	14	214	10.		11	.55
	2.	188	1 34		46	16	3	in.		6.6	.60
	23B.	Bone	Handle,	Knife	Blade, 6%	inch				100	.75
	23C.				Blade, 6%					63	.55
	23E.	The second second second	Handle.	Knife	Blade, 65	4 11				21	.55
	24B.		Handle,		Blade, 63		(7)			93	.50
	24C.		Handle,		Blade, 65					9.6	.45
	24E.		Handle,		Blade, 63			mil	101	64	.45
			Handle,		Blade, 5	11				86	.40
	59. 60.		Handle,		Blade, 53	6 11			-	1.84	.40
		-									

Manufactured specially for this market, in Sheffield, England Strong and handsomely mounted. The best goods in the market

PAASCHE AIR BRUSHES

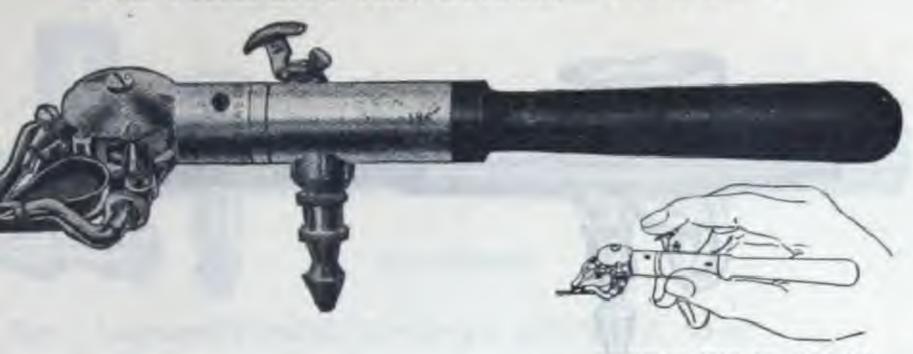


Paasche Air Brushes are in great demand. They are simple in con-struction with very few complicated parts, which enables the operator to get by with practically no interruptions due to breakdowns, etc. Where water colors, dyes and pigments of medium consistency are used, we recommend the Model E-2 Air Brush as the handiest, most practical and serviceable. This model is extensively used for lettering, designing, making of show cards, price-tickets, signs, stencil work; coloring and tinting calenders, programs, catalogue covers (embossed or plain), plumes, portraits, backgrounds, photographs, monumental and commercial designs, and purposes requiring rapidity



AR I I WALL OF THE PARTY OF THE					
Model E No. 2 Air Brush in leatherette case, with color adjusting parts, No. 1 Model E-2 color strainer, 1/2-oz. color bottle with strainer, air brusheren driver hasse attaches a strainer.	cu	ip wi	ith et.		
screw driver, hose attachment nipple, and	C	omple	ete		
directions for its care and handling		*	. 0	ach.	\$22.00
Set of Model E-2 color adjusting parts, either size				11	2.50
Model E-2, color cup No. 1 with strainer .		211		11	
Without strainer	-	3	-		-75
	147			44	.60
Model E-2, color cup No. 2 with strainer				11	1.00
Without strainer		-	-	2.1	.85
	× 1				
Model E-2, 1/2-oz. or 1-oz. color bottle with straine		4	+	11.	.65
Without strainer				2.6	.50

THE PAASCHE AIR BRUSH - MODEL A



OPERATING POSITION

del A Air Brush, complete in case, with 1 dozen Needles,
Screw-driver, Tweezers and Hose Attachment Nipple each, \$28.00
his Model Brush is built to be used at the easel and is best adapted
portrait artists

lany new, valuable and important improvements have been made be it was put in the market. These improvements are covered by a patents No. 797,315. Other patents are pending. These reserve us exclusive right of using same

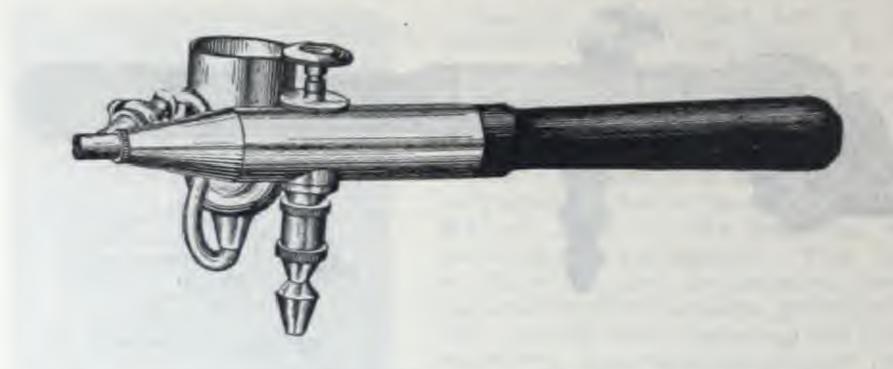
evere tests by expert artists, that before have been using the other kes of air brushes, now declare the Paasche Air Brush to be their main most important tool

The growing demand and the satisfactory results brought forth with Paasche Air Brushes already in use, is a convincing fact that this sh is a vast improvement over anything previously used. Simplicity, uracy and permanency are the governing qualities of the Paasche Air ish. These insure the best possible results and where particularly close fine work or skill is required, this brush enables the operator in etter and surer way, with less effort and time, to produce variety of ets and detail work before unknown to the Air Brush operators. It brush will work equally well on any surface used for the production art Work. For example, Paper of any kind, Canvas, Stone, Porcelain, tal, Silk and Cloth are all adapted to be worked on with the Paasche Brush

cription, thick or thin, are used successfully. Oil Paints, Chinese ite, India Inks and any makes of mineral or water colors can be aped with the Paasche Air Brush

We are the New England Agents for the Paasche Air Brush.

PAASCHE AIR BRUSH - MODEL F



Model F Air Brush including Case, One No. 1 Cup, Air Brush
Hanger and Hose Attachment Nipple . . . each, \$14.00

The Model "F" Paasche Air Brush is the simplest and best brush for making Show Cards, Air Brush Signs, Coloring of Postal Cards, Artificial Flowers, Draperies and many other like purposes

It is the only Air Brush that can produce a variety of effects ranging from the finest spray to the coarsest stipple. This gives to its users a special feature not obtainable in any other Air Brush and which enables a new class of attractive work to be done

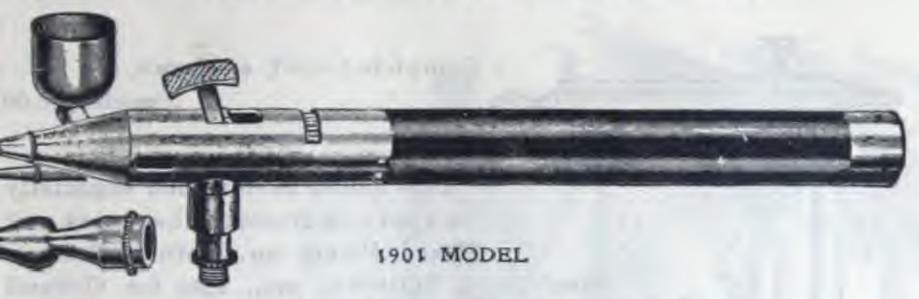
The uniform spray is under perfect control and can instantly be adjusted to produce any width or size of spray desired

The variety of work which can be done with this brush is unlimited, the simplicity of its construction makes this brush the most practical tool, free from getting out of order, free from clogging of colors, and a saving in time and money before unknown to air brush users

Each brush is carefully tested before leaving the factory. We guarantee all brushes and cheerfully replace any part that should show sign of defect within one year. Directions accompany brush

We are the New England Agents for the Paasche Air Brush

IMPROVED FOUNTAIN AIR BRUSH



Size.

Improved Fountain Air Brush, 1901 Model, hand									
piece .						1		each,	\$20.00
Improved Founta	ain P	ump	, Tan	ik an	d Tu	bing		4.6	10.00
Fountain Air Gu	age							34	2.00
Complete Outfit		-		*				16	32.75
Tubing				151	-			per foot,	.08
4 4 4 14		-2-						1000	

This model is the outgrowth of nine years of constant study and perimenting. It is covered by four patents, and embodies all the best at we know about Air Brushes. We have overcome in this model weral objectionable features that are in the earlier Brush

The principal new features are, the outside detachable color receptable nich holds twice the amount of the earlier pattern. The outside needle is, which makes possible the instant changing of the size of the initial ie. The spray regulator, which allows changing the quality of the ray (fine or coarse) without varying the air pressure. The partitions tward the levers which prevent the color from following the needle ck into the operative parts. The rest which can touch the paper to lp steady when lining, this can be removed from the Brush by unrewing if not wanted. The swiveled connection nipple, which makes sy the removing of the Brush from the tubing leading to pump. The ad of the 1899 model can be removed so that it can be cleaned of lint other accumulations

There are a number of other changes, which, combined with those umerated, constitutes as perfect an air brush as we are able to make Special Catalogue of all models A to F furnished on application Send for our complete catalogue of Fountain Air Brushes

FOUNTAIN AIR BRUSH-MODEL P

Complete Outfit, as shown,

each, \$20.00

This model is designed especially for applying Bronzes, Lacquers and Mixed Paints on Picture Frames, Mouldings, Statuary, etc., also for Ground Laying and Glazing in Potteries

Requires air supplied by power to operate. Full directions accompany each brush

Send for our Complete Catalogue of Fountain Air Brushes

FRISKET, OR AIR BRUSH TRACING PAPER

Frisket Paper, 20 × 24 inches, very transparent per doz., \$2.00 per sheet, .15

POWDER COLORS FOR AIR BRUSH

Screw Top Cans, 1 ounce

each, .25

Black
Bright Red
Cherry
Deep Blue
Emerald Green

Light Brown Light Yellow Magenta Malachite Green Orange

Rose Pink Straw Yellow Ultramarine Blue Violet

Soluble in Water or Alcohol. Put up in screw top cans containing one ounce. Contents of can will make about a gallon of strong color.

PAASCHE FOOT PUMP OUTFIT



Paasche Foot Pump Outfit, c	omp	lete,	cons	isting	g of 1	Paasch	1e	foot	
pump, air tank with gauge	and	air co	ock, f	itting	gs an	d ten	fee	et of	
the best air-brush tubing	4						4	each,	\$12.00
Paasche Foot Pump only, fin	ished	l in b	lend	ed ei	iame	1		14	7.00
Air Tank, tested for 60 lbs. a	ir pr	essur	e, wi	th ho	se fit	tings		66	2.35
Air Tank with gauge, air cocl	k and	l fitti	ngs	1				in	4.75
Air Gauge	10	14			411	144		11.	2.50

This outfit was originated by us and made a hit from its first appearance and with its new improvements, it is the latest, best and easiest working outfit of its kind. It works noiselessly and will furnish 40 lbs. pressure without any exertion

Weight, packed for shipment, 35 pounds

Send for Complete Catalogue of Air Brushes

We are the New England Agent for the Paasche Air Brush

PAASCHE LIQUID CARBONIC GAS OUTFIT



Liquid Carbonic Gas Outfit (less drum)	, wit	h wall	cla	mp,	WIE	ench	
and eight feet air brush tubing				9		each,	\$10.00
20 lb. drum of Liquid Carbonic Gas (in	our	city)	*	4		11	2.00
Wrench only	- 1				-	11	.25
Wall Clamp only, for 20 lb. drum .					-	16	.35

This outfit is especially designed and made for air brush purposes. It is very compact, the most durable of its kind, and absolutely guaranteed in every particular to give the best of service

Liquid Carbonic Gas is the most commonly used among beginners and where only one air brush is in operation, for the reason that it furnishes a steady pressure without having to do any pumping. A drum of gas (which costs \$2.00 in our city), will last about three weeks, figuring the air brush is used about six hours a day

To out-of-town customers we only send the Liquid Carbonic Gas Regulator complete with guage, wall clamp, wrench and tubing, as the supply of gas is obtainable from any soda fountain or saloon supply house in cities of a fair population, whose address we furnish you with when ordering, thereby doing away with cartage on the heavy drum from Boston

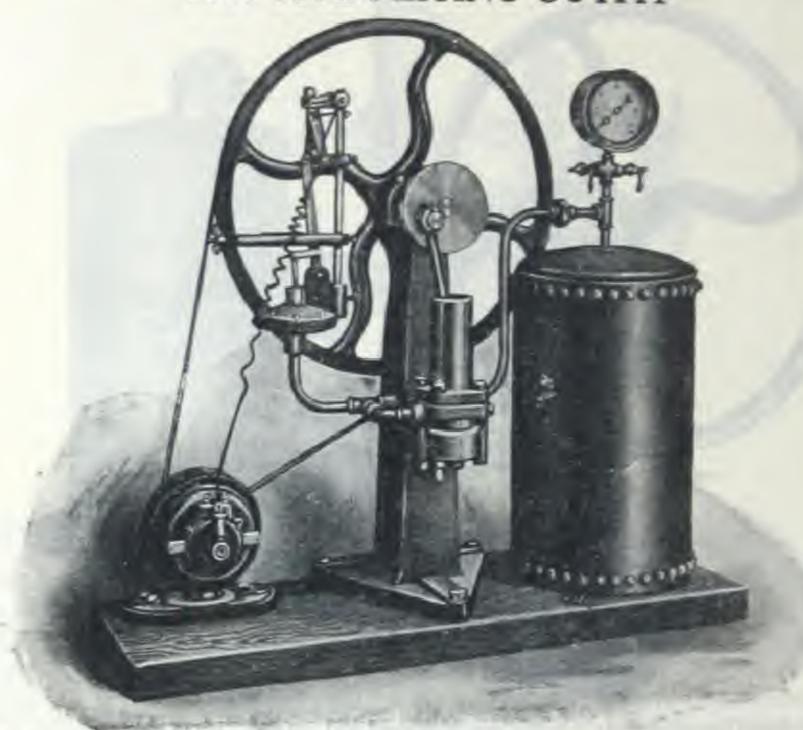
Weight of regulator complete, packed for shipment, 10 pounds
Send for Complete Catalogue of Air Brushes
We are New England Agents for the Paasche Air Brush

PAASCHE AUTOMATIC ELECTRIC AIR COMPRESSOR OUTFITS



No. 6. Air Compressor (with grease and oil cups), 1/8 H. P., 110 or 220-volt direct current motor, 8-gal. air tank, 40 lb. air guage, fittings, No. 1 automatic electric cut out, 12 ft. of electric wire with attachment plug, belt and baseboard	each,	\$50.50
No. 7. Outfit has 1/8 H.P., 110 or 115 volt, 60 cycle alternating current motor, otherwise same as No. 6	24	64.00
Nos. 6 and 7 Outfits, without motor	21	38.50
No. 8. Air Compressor (with grease and oil cups) and \(\frac{1}{2} \) H.P., 110 or 220 volt, direct current motor, otherwise same as No. 6 Outfit		59.25
This Outfit will furnish sufficient air pressure for seven artists' air brushes		
No. 9. Outfit has \(\frac{1}{6} \) H.P., 110 or 115 volt, 60 cycle, alternating current motor, otherwise same as No. 8	ie	71.00
Nos. 8 and 9 Outfits, without motor	ve.	41.25

TROJAN COMPLETE AUTOMATIC ELECTRIC AIR COMPRESSING OUTFIT



Trojan No. 1 A. Complete Outfit with ½ h. p. 110 volt, series wound, D. C. motor. Capacity 5 artists using portrait size air brushes. Any pressure up to 40 lbs.

Trojan No. 1 C. Complete Outfit with ½ h. p. 110 volt, D. C. motor. Capacity, 7 to 8 artists

Trojan No. 1 E. Complete Outfit with ½ h.p., 100 to 115 volt, 60 cycle A. C. motor and centrifugal clutch pulley and self-starting, up to 25 lbs. tank pressure. Capacity, 7 to 8 artists

Trojan No. 1 F. Complete Outfit with ½ h.p., 100 to 115 volt, 60 cycle A. C. motor

Trojan No. 1 F. Complete Outfit with ½ h.p., 100 to 115 volt, each, \$84.25

The entire outfit is bolted to a wooden base board, 10 by 30 inches. It has a 4-gallon tank, air gauge, all necessary pipe connections, motor, belt, 10 feet of lamp wire, plug to fit any lamp socket, and patent automatic switch, which serves to start and stop the motor by variation of pressure in the tank. Switch works on about 8 lbs. variation, much less than most devices of this kind, and has a quick snap, not liable to arc at time of break. Successful use for 7 years

MOORE'S AIR BRUSH COLOR RACK



		itted with								\$2.50
		itted with								3.00
Metal	Cover	complete	with	Strainer	for cor	mech	ting :	any b	ottle	
		Air Brus			18.	9111				.75
Extra	Bottle	and Stop	per w	th Cover		4		1.6		.15

The Color Rack is of seasoned wood with holes machine bored to uniform diameter and depth, fitted with bottles having non-coating aluminum tops, which unscrew easily to permit of cleaning. A glass filler for transferring color to the Air Brush Cup is inserted in the caps, and when in place serves to close the bottle and prevent waste from dust, evaporation or spilling, saving many dollars in the course of a few months. This is not attained except by the use of our Color Rack

The Color Racks are found indispensable by Photo-Colorists, Commercial Portrait Colorists, Show Card Writers, Designers, or Retouchers of Photographs in Engraving Work, keeping the colors conveniently and constantly before them

The Bottles and Stoppers may be had separate from the Color Racks. Metal Covers with strainers attached, made to readily connect the bottles direct to the Air Brush, allow constant use for hours on one class of work, with a single color, without the loss of time taken to frequently fill the cup, and without fear of the color being heavy or light, or changing consistency, as is now the case by any other method than the use of our attachable bottles

DEVOE WOOD STAINS IN POWDER FORM



Devoe Wood Stains, all colors

per package, .59

Fumed Oak
Weathered Oak
Brown Oak
Tavern Oak
Green Oak

English Oak
Antwerp Oak
Light Oak
Flemish Oak
Walnut

Mahogany Ebony Rosewood Cherry

In imitation of the above woods, put up in attractive tin packages, each containing two ounces

The contents of a package, added to one gallon of water, will make a gallon of stain

This applies to all shades except Flemish Oak. This stain is produced by adding the contents of a package to one quart of water

DIRECTIONS FOR STAINING

The wood should be made smooth with sandpaper. Always sandpaper with the grain. Apply the stain to the wood with a sponge or soft brush, as evenly as possible

All paint and varnish should be removed by Devoe Paint and Varnish Remover before applying the stain, because all these stains must always be applied to bare wood

When a varnished finish is desired, Devoe Pale Interior Varnish should be applied after staining, and on floors use Devoe Marble Floor Finish after staining

As these are water stains, varnish should never be applied until the stain is thoroughly dry and all the moisture has left the wood

ALOE'S PHOTO-OPTICAN

Simple, Inexpensive and Practical



With this wonderful instrument a child can make a perfect portrait, land-scape or intricate drawing, without the use of a negative. The cost of the instrument is absolutely the only expense to which the user is put, no artificial light, chemicals or negatives are required

A bunch of flowers placed in the instrument can be thrown on your paper, canvas or whatever you desire to draw or paint upon; the flowers will appear in their natural colors, each delicate

shade, perfectly portrayed. Should there chance to be a dew drop on petal or leaf it will sparkle in the picture in all its original brilliancy. By a simple adjustment the original may be enlarged many times or reduced at will. A photograph, tintype, woodcut, drawing, colored picture, or study may be reproduced twenty times the size of the original or, in fact almost any size from one inch to twelve feet, and the picture is not reversed

DIRECTIONS FOR USE

Place frame in south window, if possible; lower window-sash until it rests firmly on top of Photo-Optican frame (see cut); exclude all light possible from the room, as the darker the room the better the results; hang a heavy dark curtain from bottom of window-sash A, to exclude the light that would come in through the side of window not occupied by Photo-Optican. Do not fasten this curtain to side of Photo-Optican as it is necessary to pass the hand through this opening to place photographs or different objects on movable platform D. Although not essential, it is preferable to have the sun shine directly on platform D. Before placing the Photo-Optican in window, see that head C is fastened to instrument with lens pointing to platform D. See that screen, canvas or strainer B is perpendicular and square with the instrument. Now place photograph or object to be enlarged on platform D, set screen B at such distance that image will appear the desired size; move knob attached to sliding platform D up or down until image is distinct, and secure in that position by turning knob to the right. Now sketch in picture with bencil or brush

Screw reducing attachment to threads found on head C, and proceed in same manner as outlined above. If picture to be reduced is very large draw out shelf D and place picture somewhat below the instrument itself, at right angles with wall of the house

IMPORTED PYROGRAPHY OUTFITS



NO. 1166C. SPECIAL PYROGRAPHY OUTFIT

No. 1166C. Special Outfit contains Imported Double Red Rubber
Bulb with 40 inch Tubing No. 4 Cork Handle No. 1168, Hard
Rubber Union No. 53, Glass Alcohol Lamp No. 53, 3 oz., Benzine Bottle with Hook and Glass Stopper No. 54, piece Red Rubber Tubing 48 inches, Imported Platinum Point No. 3, set of 6
Colored Stains, Instruction Book "How to Burn" each, \$5.00

No. 1106D. Outfit same as C with No. 8 Point 5.50

In a drop front Designed Basswood Box with compartment in the bottom for holding materials in place, size 434 × 8× 43%

No. 5. Special Outfit contains Imported Double Red Rubber Bulb with 24 inch Tubing No. 1, Cork Handle No. 1168, Metal and Cork Union No. 60A, Glass Alcohol Lamp No. 53, Benzine Bottle with Cork Stopper No. 54B, piece Red Rubber Tubing 24 inches, Imported Platinum Point No. 28 each, \$2.50

No. 5A Outfit. Same as No. 5 Outfit with No. 21 Point each, \$2.75

No. 5B Outfit. Same as No. 5 Outfit with No. 22 Point each, \$3.00

No. 5C Outfit. Same as 5B, No. 2 Buib , each, \$3.25



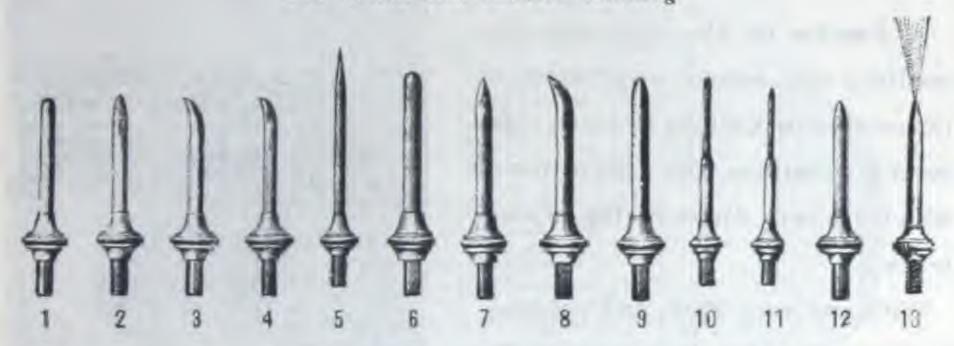
NO. 5. SPECIAL PYROGRAPHY OUTFIT

Neatly put up in a Designed Basswood Box, size 41/4 × 61/4 × 41/4 with directions

General Catalogue of Pyrography Materials furnished on application

SUPERIOR QUALITY IMPORTED PLATINUM POINTS

For Wood and Leather Burning



0.1.	Medium size. A Broad Spatulate Shape, for Heavy		
	and Broad Lines and Background Work	each,	\$2.50
2.	Medium size. Simply Pointed, for All Line Work. Not good for Shading or Broad Work	44	2.50
3.	Medium size. Curved Combination Point, suitable for a variety of Line and Background Work	11	2.50
4.	Medium size. Curved and Pointed for Scorching, only useful in Shading, Imitating Water Colors, etc.	- 66	2.50
ŏ.	Large size. Extra Long Needle Point, for Designs done entirely in Lines and No Background	4.6	3.00
6.	Large size. Heavy, Broad, Spatulate Shape. Corresponds with No. 1, but Larger and Heavier	11	3.00
7.	Large size. Simply Pointed. Corresponds with No. 2 but Larger and Heavier	ii	3.00
8.	Large size. Combination Point. Corresponds with No. 3 but Larger and Heavier	a	3.00
9.	Large size. Blunt End, well adapted for Large and Strong Outlining		3.00
10.	Small size. Flat and Blunt, Small and Light for Line Work only	166	2.00
11.	Small size. Small Pointed for Line Work only	- 44	2.00
12.	Medium size. Blunt End, corresponds with No. 9 but Smaller	in-	2.50
13.	Medium size. Pointed Scorcher for Portrait, Figure,	TV.	- 33
	Shading, etc.	mi	2 50

Note. - All our Platinum Points are thoroughly tested before leaving our establishment and none will be exchanged

General Catalogue of Pyrography Materials furnished on application

A BOOK ON THE DECORATION OF LEATHER

A treatise on the technical proceedings and artistic application of Decoration to Leather to make clear certain questions, the difficulties of which are very discouraging to amateurs

With ordinary skill and a liking for design, which is inborn in the amateur and friends of this Art, the field is unlimited and possibilities unusual, when the work is sincerely done, either from original designs or from the study of old masterpieces in this line of work



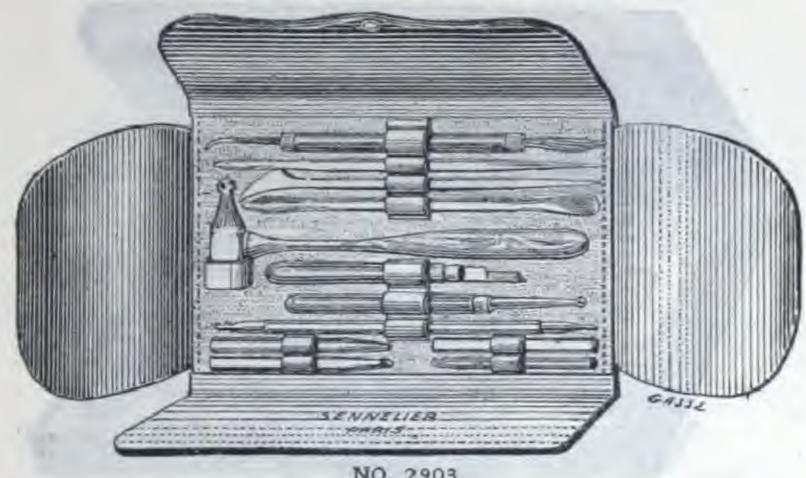
Decoration of Leather, an Instruction Book . . . per copy, .35

An Instruction Book by Monsieur L. LeBesgue, translated from the French, published by Frost & Adams Co. Lessons in Leather Work, with explanations of the uses of Tools and Materials.

CONTENTS

Prefa	ace	VII.	Stippling
I.	The Leather in General	VIII.	Use of White Leather
II.	Preparation of Leather	IX.	Leather Mosaic
III.	Different Kinds of Leather	X.	Dyes and Colorings
IV.	Designs and Tools Used	XI.	Decolorating Liquids
V.	Engraving	XII.	Leather Carving
VI.	Modeling Leather	XIII.	Uses of Nails as Ornaments

TOOLS FOR LEATHER WORK



NO. 2903

No. 2903. Complete Outfit, Pocket Folding Case, 41/4×81/4 inches, (Natural Leather which can be decorated) each, \$7.00

Case contains 12 Tools: 2 Modeling Tools, 1 Steel Hammer, 2 Embossing Tools, 1 Punch, 1 Embossing Ball Tool, 1 Cutting and Trimming Knife, 4 Chasing and Pearling Tools. Very compact outfit, having all tools most essential to leather decoration

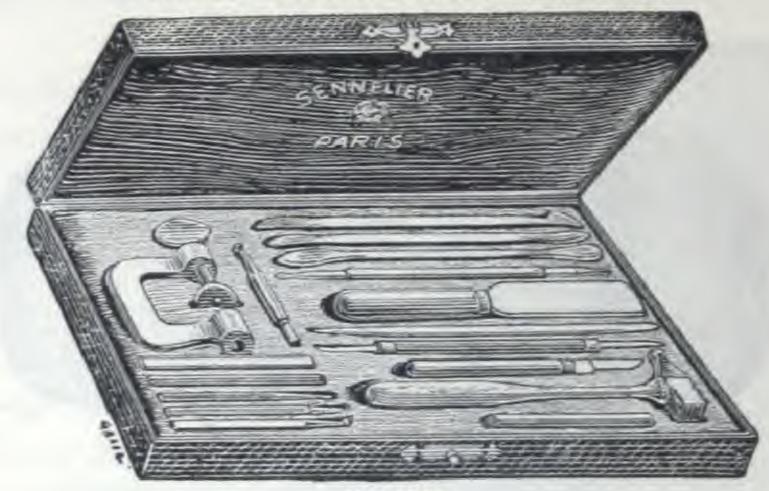


NO, 3054

No. 3054. Complete Outfit, Wood Case, 6×9 inches, Velvet Lined, Morocco Covered, . . . each, \$5.00

Case contains 11 Tools: 1 Punch, 2 Modeling Tools, 1 Burnisher, 1 Cutting and Trimming Knife, 1 Hammer, 1 Embossing Ball Tool, 4 Chasing and Pearling Tools

Tools for Leather Work - continued



NO. 3055

No. 3055. Complete Outfit, Wood Case, 814×12 inches Velvet Lined, Morocco Covered, . . . each, \$10.00

Case contains 16 Tools: 1 Clamp, 1 Embossing Ball Tool, 5 Chasing and Pearling Tools, 1 Punch, 1 Steel Burnisher, 4 Modeling Tools, 1 Hammer, 1 Paring Knife, 1 Cutting Knife, 1 Trimming Knife. A very complete outfit having all the necessary tools for every grade of work. Its range is unlimited.



NO. 2691

No. 2691. Tracing Tool, Steel, Polished Wood Handle . each, .50



NO. 2620-2

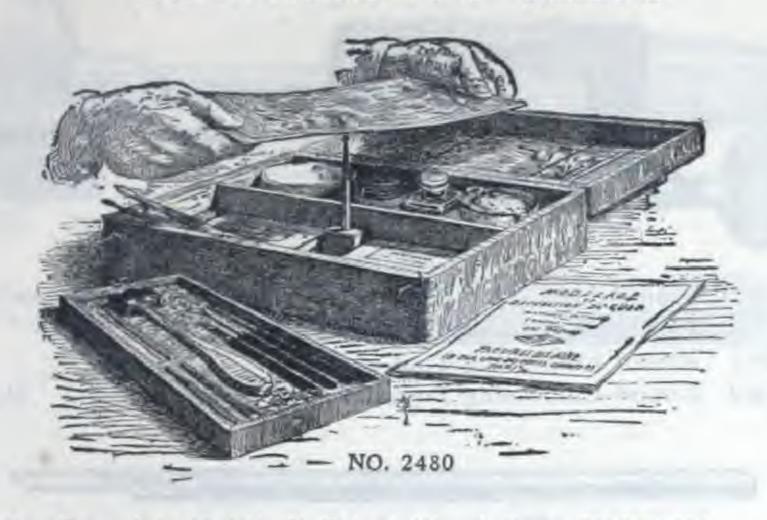
No. 2620-2. Embossing Tool, Steel, Polished Wood Handle each, .50



NO. 2601

No. 2601. Undercutting Tool, Steel, Polished Wood Handle each, .50

Tools for Leather Work - continued



No. 2480. Complete Outfit, Polished Wood Case, 3×8×10¾ inches, Hinged Cover and Half Tray Section, as shown in illustration each, \$8.00

The Combination Box and Tool Holder contains the following articles:

1 Embossing Ball Tool, 3 Chasing and Pearling Tools, 1 Hammer,

2 Tracing Tools, 1 Undercutting Tool, 4 Sticks Modeling Wax, 1 Box

Filling Powder, 1 Box Powder, 1 Bottle Stain, 1 Trimming Knife, 1 Glass

for Brushes, 1 Jar Encaustic, 1 Bristle Brush, 1 Sable Brush, 1 Sample

Decorated Leather, 6×8 inches, 1 Porcelain Cup, 1 Instruction Book

This Outfit combines Embossing Tool Holder and Outfit Box, thus doing away with Clamp



NO. 2646

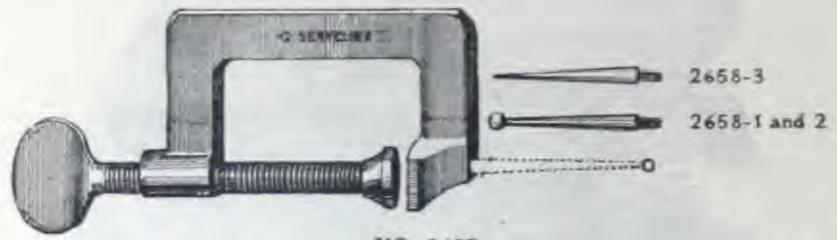
No. 2646. Spatula Form, Curved Point, Polished Steel,
Double Ends, Polished Wood Handle . . each, .75



NO. 2600

No. 2600. Spatula Form, Curved Point, Polished Steel,
Double Ends, Polished Wood Handle . . each, .75

Tools for Leather Work - continued



NO. 2657

No.	2657	Embossing Clamp		4	each,	1.00
	2658-3	Pointed Embossing Tool .			11	.50
	2658-1	Round Embossing Tool, small	4	-	et	.50
	2658-2	Round Embossing Tool, large			AL.	.60



NO. 2690

No. 2690. Cutting and Trimming Knife . . . each, .50



NO. 2606

No. 2606. Modeling Tool, All Steel, Polished, 614 in. long each, .50



NO. 2885-7

No. 2885-7. Modeling Tool, All Steel, Polished, 634 in. long each, .50



NO. 2885-9

No. 2885-9. Modeling Tool, All Steel, Polished, 634 in. long each, .50



NO. 2939

No. 2939. Modeling Tool, All Steel, Polished, 634 in. long each, .50

.60

.60

.60

.60

Tools for Leather Work — continued NO. 2623

No. 2628. Steel Hammer for Leathers each, .80



NO. 2602

No. 2602. Undercutting Knife cach, .60

STEEL CHASING AND PEARLING TOOLS

	STEEL	CHASING	AND PE	ARLING	TOO	LS		
6	0	*	X		1	X	23	
2700-8	2700-12	2700-31	2700-36	2700-38	1	16	117	7
No. 116.	Steel (Chasing an	d Pearling	Tools .			each,	.60
117.	4.6	**	41		.2.		7.6	.60
2700-8.	10	1.0	43				66	.60
2700-12.	11	44	40				10	.60
2700-31.	3.5	12					11	.60
2700-36.	re-	1.1	*1				4.6	.60
2700-38.	a	**	**		9		**	.60
	the.	0	43	100 mg	150	9	0	
2700-93	2700-95	2700-99	2700-109	2700-112	2700	-114	2700-1	16
No. 2700-93.	Steel (Chasing an	d Pearling	Tools .			each,	.60
2700-95.	10	11	- 11	*			"	.60
2700-99.	44	4.0	44		,		140	.60
-100 00.							10.79	

22

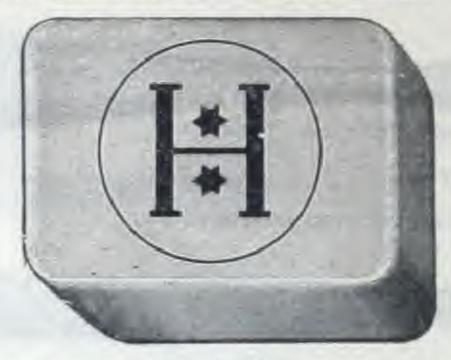
2700-109.

2700-112.

2700-114.

2700-116.

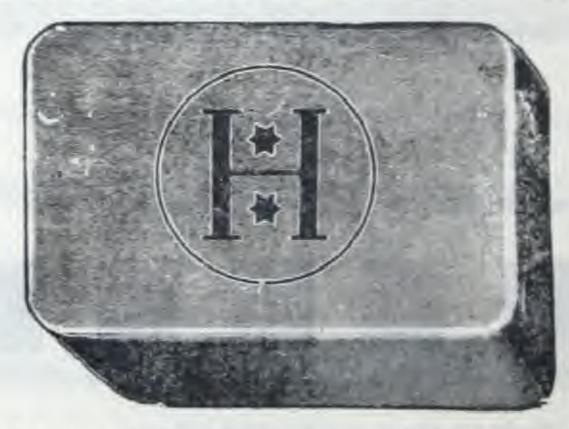
HARDTMUTH'S GRAY "PLIABLE" RUBBER



No.	4.	Gray,	size	2	×3	each,	.65	No. 20.	Gray,	size	134	×134	eac!	h,.14
	8.	- 11			×215		.35		14	14	11/8	× 15%	0	.12
	10.	13.	4	1 1/2	× 21/8	11	.30	30.	68	1.4	1	×134	***	.10
	12.	1.6			$\times 2$.25	36.	114	116	1	× 13/8	1.8	.08
	16.	(1)			×2		.18	Any abo	ove		pe	r pou	nd,	2.50

Softer than the Pink Pliable Rubber and invaluable for cleaning Drawings, Engravings, Crayons, etc.

HARDTMUTH'S PINK "PLIABLE" RUBBER



No.	4.	Pink,	size	2	×3	each,	.65	No. 20.	Pink.	size	114	×14	each,	.14
	8.					4.0			15		138	× 15%	63	.12
	10.	4.4	15	134	× 21/8	44	.30	30.	4.5	14.	1	XIX	14	.10
	12.	11.	13	13/8	$\times 2$	53	.25	36.	16	KE	1	× 13/8	1.4	.08
	16.	1.0	110	114	X2	11	.18	Any abo	ove			er po		

Soft and pliable, and will erase pencil marks easily and without injury to Tracing Paper or any other delicate drawing material

Note. - Thickness of Rubber varies according to size

W. & N. SOFT WHITE AND GRIFFIN RUBBER



Note.-Thickness of Rubber varies according to size

This rubber is softer than our Pink Pliable Rubber, and will be found invaluable for cleaning Drawings, Engravings, Crayons, etc.

W. & N. SOFT PINK INDIAN RUBBER



Note.-Thickness of Rubber varies according to size

This Rubber is soft and pliable, and will be found to erase pencil marks easily and without injury to either Tracing Paper or any other delicate drawing material used

A. W. FABER'S RED RUBBER ERASER

Flat, First Quality, Extra Soft Finish



No. 12.	Red So	ft Rubb	er, size	11/2	×21/4	6.					each	, .10
24.	-916	11	·u	11/8	× 2						- 24	.08
36.	4.5	16	de	1	×11/2						44	.05
Any abov	e .					4	100	14 1	d	per	pound,	1.50
		ound in										

NOTE. - Thickness of Rubber varies according to size

PLASTIC OR KNEADED RUBBER

A. W. FABER'S
PLASTIC RUBBER
No. 7530.

MADE IN
NEW YORK, U. S. A.



Small	Kneaded	Rubber,	size	¥×14	-	1	per dozen,	.60 each,	.05
Large	198	183-	**	1¼×15%	*	11.2		1.20 "	.10

This is a Plastic Rubber, capable of being kneaded into any desirable shape, and is unexcelled for erasing pencil marks and cleaning drawings. It does the work quickly, leaving the paper very clean, and not injuring the surface. Each piece of rubber separately wrapped in paper

EBERHARD FABER'S IDEAL ERASER

Flat, Soft Finish Pencil Rubber

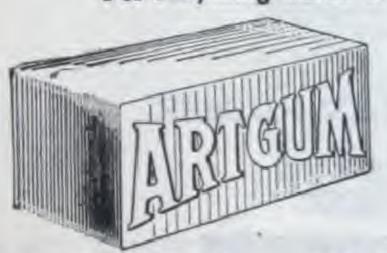


No. 12. 24. 36.	66	11/8	×134		E)	.10	60.	11	7%×15 7%×154 13×154	each,	.05 .04 .03
99.		3	A	ny o	f the a	boy					

NOTE. - Thickness of Rubber varies according to size

ARTGUM-THE DRY CLEANER

For Anything Made of Wood, Leather, Cloth or Paper





No. 1. Size 1 1/8 × 1 1/8 . each, .05 | No. 8. Size 1 1/8 × 2 1/4 × 1 1/8 each, .12 2. " 1 × 2 × 1 " .10 | 4. " 2 × 3 × 1 " .15 No. 5. Size 3 × 3 × 2 . each, .30

THE ERASER FOR THE ARTIST

Artgum removes surface dirt from everything without the use of water or any other liquid, and does not change the color of nor injure the articles rubbed with it. It does not take out grease spots or other stains which have gone below the surface

Artgum cleans gloves, belts, tan leather shoes, white canvas shoes, white kid and suede slippers, hand bags, coat collars, the lapels of coats and vests, straw hats, the band and rims of felt hats, silk and satin goods, furniture coverings, curtains, wall paper, frescoes, pictures, books, drawings, photographs, etc. No danger from fire

To the office-man Artgum is invaluable, as it enables him to remove pencil marks and memoranda from books and papers without erasing anything that is printed, or written in ink

EBERHARD FABER'S CABINET PENCIL RUBBER



NO. 1015

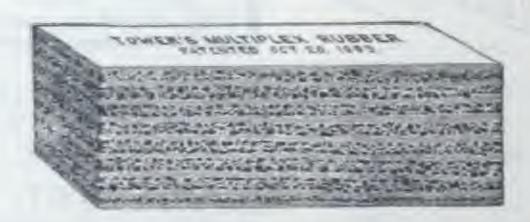
No. 8.	Size 1/ ×	314 .	each	, .25	No. 40.	Size	e 3%×211	each	, .05
12.	" 3 X		13	.15	26.7%		38×118	 16	.03
20.	II TX		3.6	.10	80.	16	5 × 215	114	.03
30.	4.0		40	.06	120.	16	16×116	 16	.03

Any of the above . . per lb., \$1.80

This Rubber is of oblong shape, one edge being beyeled. It is of a soft finish, and especially adapted to Commercial and School use

Note.-Thickness of rubber varies according to size

TOWERS' MULTIPLEX RUBBER



No. 4.	Size	e 1 1/4 × 4 7/8		each,	.75	No. 20.	Size	2 56×234		each,	.12
6.	14	156×3	4		.40	24.	6.6	38×238			.11
10.	18	1 ×3	+	44	.25	30.		1/2×21/4	*		.10
12.	16	34×278	A	33. 1	.20	40.	**	1/2×2	-	48	.06
10.	11	英×2%	*	31	.15	60.	44	%×1%		-6.6	.04

Any of above . . per 1b., \$2.50

NOTE, -Thickness of rubber varies according to size

SPONGE RUBBER FOR CLEANING DRAWINGS



Size	1×1×1		1,0		each,	.10	Size	3×3×1			10	each,	.85
	1×2×1				16	.20	16.6	3×4×1	-	-	4	1.8	1.00
	2×2×1	*		-	46	.40	14	$4 \times 4 \times 1$				11	1.25
	2×3×1				14	.60		$4 \times 5 \times 1$	-			11.6	1.40
	2×4×1	3				.75		$4 \times 6 \times 1$		16.	-	6.6	1.60

SPONGE RUBBER, WITH SOLID BACK

Size 1 ×1 ×1 .	+	each, .15	Size 2×4×1		4	each, .90
" 134×24×38 .		.40	" 4×6×1			" 1.90

EBERHARD FABER'S RUBBER BANDS



No. 200. Rubber Bands assorted sizes in ¼ pound boxes per lb., \$4.00 Containing Nos. 71, 72, 61, 62, 63, 82, 29, 32, 50, 51, 11

ROUND RUBBER STRIPS

For Pencil Point Protectors and Metal Tips of Pencils

HALF GROSS



IN A BOX

No. 1230.	Gray, large diameter, for point protectors		per gro.,	\$1.25
1231.	to the bevel	-		1.25
1233.	" medium " for pencil tips		115	1.25
	4 1 7 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ng	1.5	1.25
1232.			(1)	1.50
	. Red, large diameter, for point protectors		11	1.50
1233R	, " medium " for pencil tips .		-	1.50

UNION INK AND PENCIL ERASER



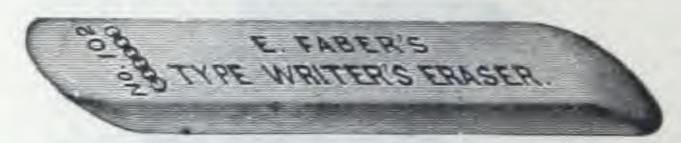
No. 110. "Union" Double Bevel, size 1 × 25 per dozen, .60 each, .06
Packed 1 dozen in a box

VIRGIN RUBBER

Pure Para Gum, Unvulcanized

Virgin Rubber, cut in irregular sizes . . . each, .20 to .30 Packed 1 pound in a box per pound, \$3.00

SMALL TYPE WRITER'S ERASER



No. 102. Type Writer's Eraser, small size 1/2 × 21/4 per dozen, .60 each, .06

LARGE TYPE WRITER'S ERASER



No. 104. Type Writer's Eraser, large size 36 × 41/6 per dozen, \$1.20 each, .12

Type Writers have for a long time felt the want of a good eraser, suitable in shape and composition for correcting their work. It has been the aim to produce an eraser which will fully meet this requirement. The result is the Type Writer's Eraser, which is excellent for the purpose. It will be found with every thoroughly equipped machine. As all good things are imitated, so it is the case with this article, and inferior Type Writer's Erasers have been placed on the market by other manufacturers, of almost the same shape and appearance

Packed 1 dozen in a box

COLUMBIA DOUBLE BEVEL PENCIL RUBBER



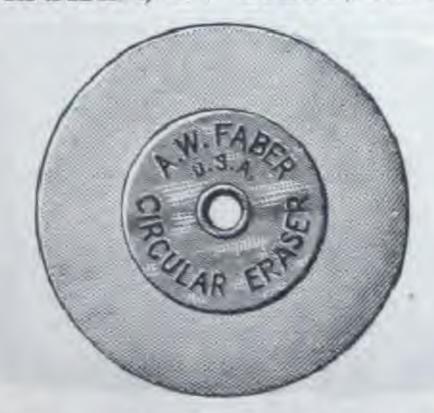
No. 114. "Columbia," Mottled, size 1/8 × 23/4 per dozen, .60 each, .06

EMERALD AND RUBY PENCIL RUBBERS



AND DESCRIPTION OF THE PERSON	"Emerald," Green,	Small Large		+	per dozen,	1.20		.06
211. 112.	"Ruby," Red	Small			1.6	.60	64	.06
212.	11 11	Large	15	10	11	1,20	16	.12

CIRCULAR ERASER, IN GRAY, RED OR GREEN



No. 1080. Circular Eraser, Gray, Red or Green per dozen, .60 each, .06

Mounted on Nickel Plated discs. This Eraser is of a compound that will readily erase both Ink and Pencil marks. The circular shape will be found very useful and convenient, giving a continuous narrow edge Packed one dozen on cards

A. W. FABER'S INK ERASERS



No. 7075. Small Ink Eraser, 25 in box, size 1 × 1 ½ in. per 100 \$3.95 each, .06 7076. " " 50 " " 1 × 1 ½ in. " 3.95 " .06 7077. Large " 25 " " 1¼ × 1 ½ in. " 7.15 " 12 7078. Ex. Large " 12 " 1½ × 2 ¾ in. " 1.80 " .20

Note.-Thickness of rubber varies according to size

FROST & ADAMS CO.'S BAY STATE GRAY "PLIABLE" RUBBER



No. 4. Gray, size 218 × 3 each, .65 No. 20. Gray, size 1 1/4 × 1 1/4 each, .14 8. 158×234 .35 136×134 24. 10. 13%×13% 1 % × 2 1/8 .10 .30 30. 11/2×2 " 1 × 13/8 12. ,25 36. .08 138×278 16. .18 Any of above per pound, \$2.00

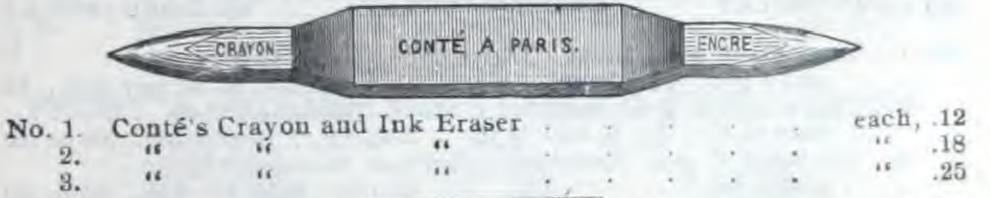
NIGRIVORINE RUBBER



F. & A.	Co. Small s	ize.	American			per dozen, .60 each, .6	06
66	Medium		4.5		*	.80 44 .0	08
14	The second second	11	11.			1.00 "	10
French	Small size					.75 "	1.
11	Medium "					1.00 "	145
44	Large "			4		1.15 "	1_

Double Pointed, White Soft Finish. More Durable and Superior to the Chamois Buck Stump as a Blender. The French 1 dozen on a card

CONTE'S WOOD CENTRE RUBBER STUMPS



A. W. FABER'S INK AND PENCIL RUBBER IN CEDAR

	PENGIL - 1028	E.F	ABE	R	ų.	S. A. —	INK			
	Pencil Rubber,	long			,	per	doz.,		each,	
7017. 7018.	Ink Ink and Pencil	Rubber	101	ng			16	$\frac{200}{2.00}$	1.0	.20

N

A. W. FABER'S INK AND PENCIL ERASER Wood Centre



Small size, each, .20. Medium size, each, .25. Large size, each, .35

SOLIDHED THUMB TACKS IN DISPLAY CASES

BRASS AND GERMAN SILVER



NO. 1 SOLIDHED DISPLAY



NO. 6 NO. 2



SOLIDHED DISPLAY SOLIDHED DISPLAY

No. 1. Contains 3 gro. Brass: 1 gro. each 3% and 1/2 in. flat and 1 gro. ½ in. bevel . . . display, \$3.00 per doz., .10
3. Contains 7½ gro. Assorted: Steel, Brass and German Silver, 38, 3/2 and 3/8 in. display, 7.50 per doz., .06 to .30
4. Contains 8 gro. Assorted: German Silver, Brass and Steel display, 9.50 per doz., .05 to .20 5. Contains 3 gro, Brass; style of No. 6, contents as No. 1 display, 3.00 per doz., 10



INCH



M INCH



N INCH

Bevel	led Brass Thuu	b Tacks,	38	inch		per	gro.,	\$1.00	per doz.,	.10
11	41	11	56	4.6	*		10	1.10	11	.12
66	German Silver	XE	3/8	44	3		14	1.25		.15
111		93	1/2	15	0		12	1.65	11	-15
4.4	11	16	38	4.6			44	1.85	11	.20

COLORED CELLULOID THUMB TACKS

	THE PARTY OF THE P
No. 2.	Contains 3 gro. Colors: 4 each, Red, White and Blue
· ·	on a block 3% and 5% in display, 6.00 per doz., .20
6.	Contains 3 gro. Colors: Red, White and Blue, 36 and
	48 III.
Cellulo	oid Thumb Tacks, 3% inch, Red, White, Blue, Green,
Ve	llow, Black
Callula	per gro., \$2.25 per doz., 20
Centulo	oid Thumb Tacks, % inch, Red, White, Blue, Green,
Y e	llow, Black per gro., 2.25 per doz., .20
	Po. 810.) 2.20 Per doz., .20

"GOVERNMENT" THUMB TACKS

BRASS - ROUNDED HEADS

	-		
Section	1-2 inch	5-8 inch	3-8 inch
		27 200 1/1	#1 av 1 a

No. 851. 3% in. per gro., \$1.00 doz., .10 | No. 853. 3% in. per gro., \$1.25 doz., .20 852. 3/2 " " 1.10 " .15 | One dozen on cork

GERMAN SILVER-ROUNDED HEADS

No. 861. 3/8 in. per gro., \$1 50 doz., .15 | No. 863. 3/8 in. per gro., \$1.85 doz., .25 862. 1/2 " 1.65 " .20 One dozen on Cork

These Tacks are made by a new method, which insures indestructibility; the points will not push through the heads nor pull out

GERMAN SILVER THUMB TACKS

STEEL POINTS, ROUND OR BEVELED HEADS

5 in. per doz., 25 7 in. per doz., 30 1 in. per doz., 45

FROST & ADAMS CO.'S STAMPED STEEL TACKS







No. 1160. 15 in. per gro., .80 doz., .10 | No. 1164. 1/2 in. per gro., \$1.20 doz., .15

FROST & ADAMS CO.'S THUMB TACKS

No. 1351. 3% in. per gro., .80 doz., .10 | No. 1350. 3% in. per gro., .80 doz., .10 | 1353. 3/2 " 1.00 " .12 | 1354. 3/2 " 1.00 " .12 | 1363. 3/8 " 1.20 " .15 | 1364. 3/8 " " 1.20 " .15

CENTRES OF HORN AND METAL







Name and Address of the Owner, which is not to the owner, and the		-			
Brass Centre, for use with Dividers, To	in.	diam	eter		per doz25
Horn Centre		100			each, .10
Horn Centre with German Silver Rim	140	- 1	100		.50
German Silver Centre with Handle.	19.1	11.50	-	4	.35

FINE GERMAN SILVER THUMB TACKS

Round	Head.	A2				d Head.	in.	per doz	50
	-	3/8 10	1.0	.60	1.5	1.1	3/8 11	4.8	.60
11	6.0	TO IX	4.6	.65	4.6	66	2 41	44	1
41	41	1/2 11	44	.70	116	4.6	16 11	110	-65
185	65	75 15	41	.80	116	ice	2 11	11	.70
44.	4.6	38 11	15	.90	54.	E	58 16	11	.80

Steel Points screwed in and riveted. One dozen on a cork

FROST & ADAMS CO'S

ROUND POINT STEEL THUMB TACKS

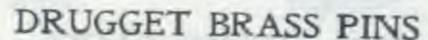
No. 1.	Round	Head	, 3%	in.			18	per gr	0., .80	per do	z., .10
2.	44	44	1/2	14				11	1.00		.12
8.	15	4.6	38	4.5	-	-		110	1.20		.15

BRONZE RUG TACKS

For Fastening Rugs on Hard-wood Floors

Bronze, 11 in. per gro., \$3.00 per doz., .30 % in. 3.50 .35

1 dozen on card, in a box



Brass Pins, 56 in. per gro., \$3.00 per doz., .30

1 gross loose in a box



THUMB TACK-LIFTER

Tack Lifter and Paper Knife, Brass, Nickle Plated, 54 in. each, .20



A handy and simple instrument to extract thumb tacks. The end of the Lifter is placed under the head of the tack, and takes it out without bending the point or wrenching off the head, as is done by using a knife

The handle of this instrument is a Paper Knife, useful for removing drawings which have been glued to the board

FROST & ADAMS CO.'S

SCHOOL STEEL THUMB TACKS







No. 2



No. 3

lo. 1. 16 in. 2. 38 "

in. per gross, .30

No. 3. ½ in

No. 3. 1/2 in per gross, .50

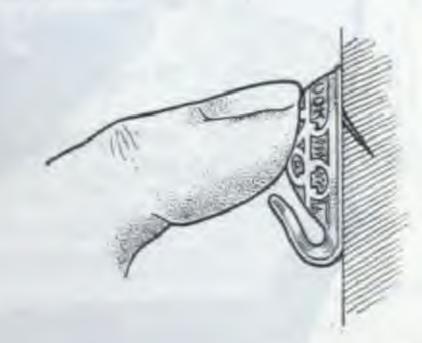
STANDARD STEEL THUMB TACKS.

To.	751	3/8 in.		+	, per gross	\$.80,		per doz.	.08
		½ in.	4	4	. 41	1.00,		1.5	.10

BRASS HANDIHOOK

Reg. U.S. Pat. Off.





rass Handihooks .

per gross, \$3.00 per doz., .30

The Handihook is the most wonderful little hook ever devised

You don't need a hammer or screwdriver for a Handihook. Just push in with your thumb - that's all. Handy? Well!

It's up before you can count three. And it goes in anywhere — wall or woodwork — without leaving marks. And strong? It'll hold 10 pounds without a tremor

You'll find the Handihook just the thing for hanging pictures, signs, alendars, whisks, towels, coats, waists, skirts, utensils, etc.

MOORE PUSH-PINS-IN PACKETS AND CARTONS

Two Sizes - Uses Unlimited

NO. 2

With Glass Heads and Steel Points

Here's a Pin!

Push it in!

NO. 1

No. 1. Small Moore Push-Pins, 1/2 doz. in a packet, 24 packets in a carton

per gro., \$2.40 packet, .10

No. 2. Large Moore Push-Pins, 1/2 doz. in a packet, 24 packets in a carton

per gro., \$2.40 packet, .10



Box contains 72 Packets of Pins, assorted No. 1 and No. 2, and a Plush Pad 3 gross pins, \$7.20 packet, .10

This is the latest in Moore Push-Pius-one-half gross of packets, assorted, No. 1 and No. 2, put up in blue-colored box, size 1134 × 938 × 23/2 inches, with easel-lid and containing a Purple Plush Pad

The Pad contains a resisting material which enables one to test the

merits of the Piu by inserting it in Pad

This outfit placed on a show-case by the retailer attracts the attention of patrons to these neat and useful Pins and causes quick sales

Moore Push-Pins are thoroughly practical and supply a long-felt want

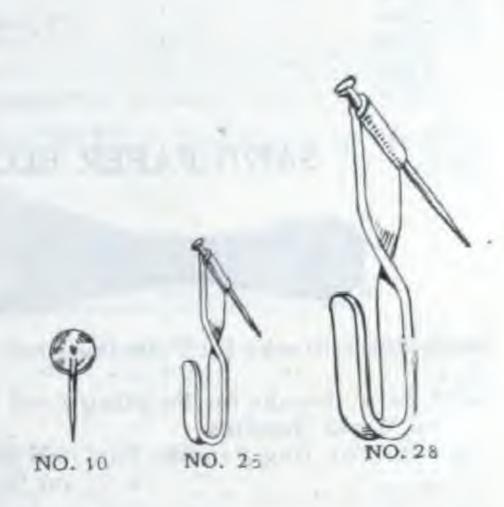
MOORE PUSH-PINS AND PUSHLESS HANGERS

HANG YOUR PICTURES ON INVISIBLE SUPPORTS AND IMPROVE THE APPEARANCE OF YOUR HOME

WILL NOT MAR WOOD OR PLASTER WALLS



GREEN DISPLAY, STYLE D Dimensions 10% x 6% 4%



Display, Style D							*			each,	\$7.80
------------------	--	--	--	--	--	--	---	--	--	-------	--------

Contains an assortment of Moore Push Products as follows:

18	10 cent	Packets of	1/2 0	lozen N	0.	11	Moore Push-Pins	
22	400 000	Doubetent	7/ 2	lanne N	10 6) (Dinoic r and	

16 10 cent	Packets of	1/2	dozen	No.	25 (Moore	Pushless	Hangers
1 10 mak	Daghale of	1/	dozen	No	921	MIGOIC	T MANAGE	

4 In Cour	Turnense	14		3 · · ·	
8 10 cent	Blocks of 1	dozen	No. 31,	38 in.,	1

0 10 00	Tr Dier men at a			100		44 41 41	my to the desired to the
8 10 cer	nt Blocks of	1 dozen 1	No. 3	1 /2	in.,	Moore Push	Thumbtacks

8 10 cent Blocks of 1 dozen No. 33, 38 in.,)

No. 95	Moore Pushless Brass Hangers	- 2	 	per 1/2 doz., .10
TAO. 70.	Moore I montene prime			1/ 1 40

*	3417	***			×/	1. 4/
1	98.	Moore Pushless Bra	ss Hangers .	 13	. per 3	doz., .10

ARKANSAS OIL STONES



NO. 2720

	Arkansas Oi	Stone,	in case w	vith cover,	3 in	each,	.75
2721.		1.0	3.1	46	ō 15 .	84	2.00
2725.	X1	118	on wood	with hand!	e, 3 in	1831	.60
2726.	93	-64	4.6	16	4 "	44	1.00
2727.	44.	1.0	51	93	5 4	41	1.50
2730.	75	33	Slips .		each from	.25 to	1.50

SAND PAPER BLOCKS AND FILES



Sand Paper Blocks for Pointing Lead Pencils, 11/2 × 4 in.	*	each, .05
Sand Paper Blocks for Pointing Lead Pencils, 11/2×4"		66 10
on Wood Handles	-	.10
Files for Pointing Pencils, 5 in., all Steel		.17
" 3 " on Wood Handles .		.25

PAPER WEIGHTS





Lead Paper Weight, covered with leather, 4 ×2¼× 1 in., about 2¼ 1bs. Lead Paper Weight, covered with leather, 4¼×2½× 1 in.,	each,	\$1.00
about 3% 1bs	1.1	1 35
Iron Paper Weight, with Knob, 2 1/4 in. diam., Nickel Plated Lead Paper Weight, covered with billiard cloth, round,	11.	1.00
236 × 56 in., 1 lb.	14-	.50
Lead Paper Weight, covered with billiard cloth, round,		3
2½×1½ in , 2 lb	4.5	1.00

FROST & ADAMS CO'S STRAIGHT EDGES



HARDWOOD LINED, SQUARE EDGES, THIN

4	inches long	each.	.401	42 i	nches long	each, .85	60	inches long	each,	\$2.00
0	11	3.5	.50	48	44	1.15	72	44	111	3.00
et	039	3.0	.70	54	153	1.50				

HARDWOOD, BEVELED EDGE, THICK

12	inches long	each,	.15	30	inches long	.30		inches long	each, .60
15	in		.20		2.2	.50	-		1.00
24	96	-00	,25						

MAHOGANY, EBONY LINED, THIN, SQUARE EDGES

24	inches long	each,	.50	42 in	nches long	each,	\$1.00	60 inc	hes long	each,	\$2.00
30	11	-64	.60	48	- 11	6.0	1.35	72	46	4.1	2.75
36	1.6.	1.6	.80	54	4.5	EZ.	1.60				

MAPLE CELLULOID LINED STRAIGHT EDGES, SQUARE EDGES

12 inc

18

-					
hes long	each, .45	24 inches 1	ong each, \$1.00	42 inches lo	ng each, \$1.80
11	" .55		0 1.25		
31	s 70.	26 16	1.50		

CELLULOID STRAIGHT EDGES

9	inches long	each40	1 18	inches long	each	75	30 in	ches long	each;	\$1.25
12	11	" ,50	1	The second secon	14	.85	36	41	14	1.50
15	.64	" ,60		THE RESERVE AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IN COLUMN TO THE PERSON NAMED IN COLUM	14	1.00	42	0.0 42	-44	2.00

STEEL, NICKEL PLATED, WITH SQUARE EDGES

15	in, long,	11	wide,	J.	thick	each,	\$1.25	42	in long	2, 21	wide,	thick .	each,	\$5.00
18	11	11	i.	do	1.6	12	1.50	48	16	24	11	3, 11	48	6.00
24	74	14	XX	7	4.5	14.6	2.00	60	13	24	1.6	12 11	- 11	8.50
30	4.6	15	100	7	**	- 64	3.00	72	15	3	1.6	10 11	110	12.00
36	**	2	11	75	4.6	1.5	4.00							

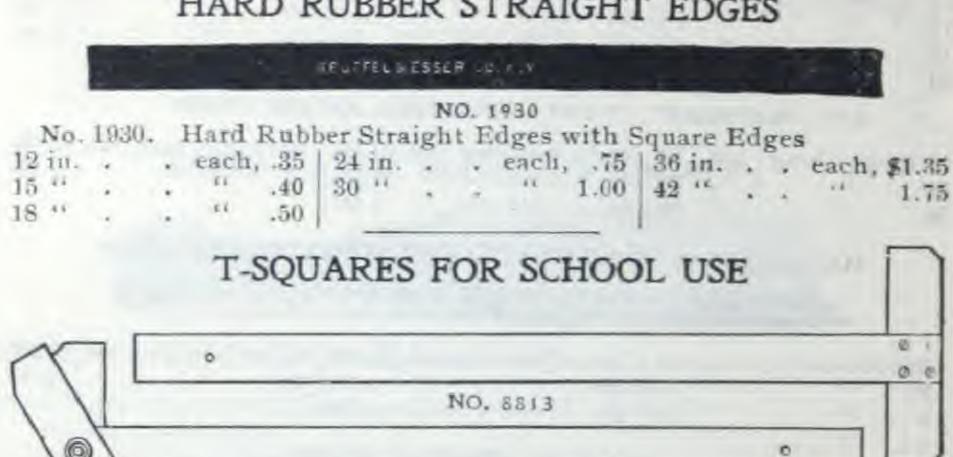
STEEL, NICKEL PLATED, ONE EDGE BEVELED

15	in. long,	13	wide.	2	thick	each.	\$1.75	42	in long.	21	wide,	1/4	thick	each,	\$ 6.50
18	11	14	10	00	16.6	17		48	14		1.5	Th		110	8.00
24	441	14	144	x	1611		3.00			24	8%	+	11	10	11.00
30	-16	12	165	7	110	6.8	4.00				13			14	15.00
36	11	2	44	T.	E.F	Xe	5.00					-			

Dividing Ste. Strai 'tedges, to sixteenths of inches . per foot, \$1.00

FROST & ADAMS CO.'S PEARWOOD STRAIGHT EDGES

				К	EUITEL &	ESSET	CO 1	N Y				Q	
- 11						NO.	225	0					
No.: 12 in. 15 " 18 "	2250.		earw each,	.12 .15 .20	24 in. 30 "	ge b	evel	led each,	.25 .30	36 in. 42 ''	:		each, .40
		F	IAR	DR	UBBE	ER	ST	RAIG	HI	EDG	ES		



NO. 8814

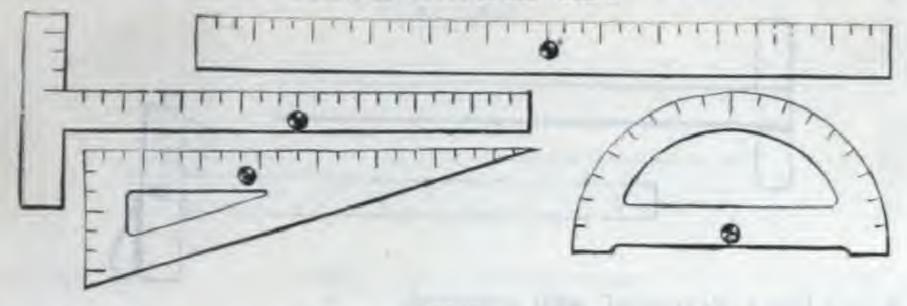
WHITEWOOD HEAD, HARDWOOD BLADE

No.	8813	. Fixed	Head			No. 8814. Shifting Head							
15 in.		per doz.,	\$1.95	each,	.20	15	in.	-	per doz.,	\$3.75	each.	.30	
18 "	+	11	2.25		.25		3.0		46	4.75	4.1	.40	
21 "		166	2.70	14	.30	21	66		11	5.65	11	.45	
24 11		11.	3.10	1.0	.35	24	60		-66	6.55	11	.55	
30		94	3.60	14	.40	30	10		- 64	7 70	5.6	.65	
36 ''		XX	4.20	4.6	.45	36	10	+	11	9.00	2.6	.75	

HARDWOOD HEAD, HARDWOOD BLADE

	No.	8815.	Fixed	Head			1 1	No.	8816.	Shiftin	g Hea	A	
15	in.	-	per doz	, \$2.50	each,	.25	15	in.		per doz.,	\$6.25	each,	.55
18	1.0		111	2.85	TV.	.30	18			12	7.60		.65
21	15.5	-	Xx	3 30	00	.35	21	25			8.25	6.0	.70
21	78		- 10	3.85	1.6	.40	24	66		14.	9.00	13	.75
30	4.4		84	4.50	35	45	30	44		41	10.25	13.	.90
36	156	0		5.25	11	.50	36	10	19	16	11.20	46	1.00

BLACKBOARD SET



8840

Blackboard Set of Hardwood, contains Straight Edge, 36 inch, T Square, 24 inch, Triangle, 24 inch, all divided to inches and eighths, Protractor, 15½ inch, divided to degrees per set, \$6.00

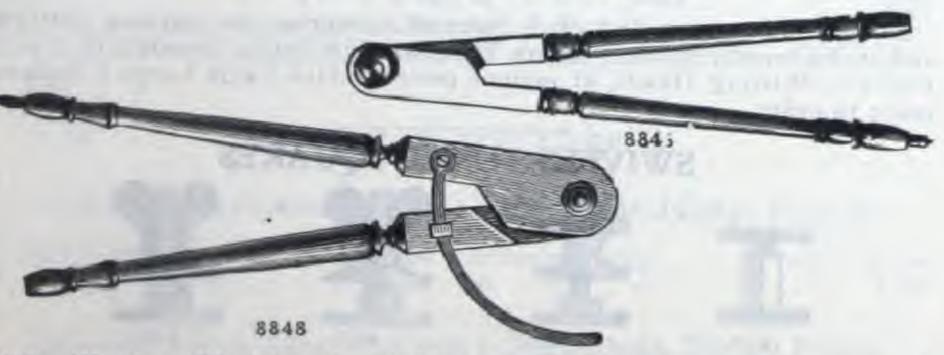
BLACKBOARD RULERS

3 6 9 12 18 21 24 27

8842

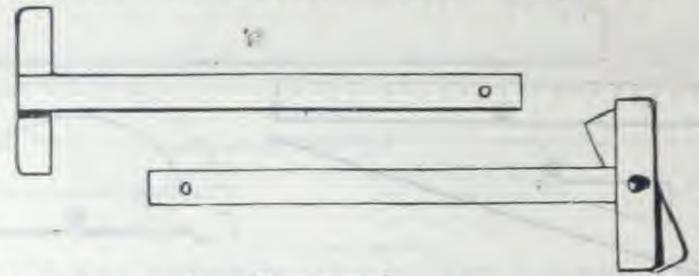
"Standard" Blackboard Rulers, well seasoned Hardwood, well finished, with a substantial and convenient handle, Ruler 30 inch, divided to inches and eighths each, .60

BLACKBOARD DIVIDERS



846. Wooden Blackboard Dividers, joint with japanned
Thumbscrew, 16 in., each, \$1.50 20 in., each, \$1.75
Wooden Blackboard Dividers, with japanned arc, and
Clampscrew, 20 in., each, \$2.50 24 in., each, \$2.75

FROST & ADAMS CO'S T SQUARES



Fixed Head, Pearwood, well seasoned

15 i	n. long	each.	.35	30 in	. long	each	, .60	54 in	n. long	each,	\$1.35
18	11		.40		24	1.5	.70	60	66		1.50
21	4.6		.45		P4.	14	.80	72	-11	8.5	2.00
24	11	1.0	.50	48	46	4.6	1.25				

Shifting Head, Pearwood, well seasoned, Swivel

15 i	n. long	each.	.70	30 in	n. long	each,	\$1.00	54 in	. long	each,	\$2 00
18	11			86		24	1.15	60	44	8.4	2 25
21	1.0	3.6	.80	11.70.40	(1)	16	1.25	72	44	4.5	2.50
24	15	11	.90	48	44	4.6	1.50				

Fixed Head, Black Walnut; Maple Blade

18 is	n. long	each.	.45	36 it	1, long	eacl	00. ,	54 11	1. long	each,	\$1.40
21	11		.50		11	F.L.	1.05	60	11	16 -	1.75
24	X. 6	- 11	.60	48	54	Cr.	1.20	72	33	11	2.00
30	44	1.6	.75	1				100			

Shifting Head, Black Walnut; Maple Blade, Swivel

18 in	n. long	each.	\$1.00	36 i	n. long	each	\$1.50	54 ii	. long	each,	\$2.10
21			1.10		11	16	1.65	60	11	4.5	2.50
24	1.0	6.6	1.20	48	100	11/1	1.85	72	44	8.6	3.00
30	18.81	11	1.35	1							

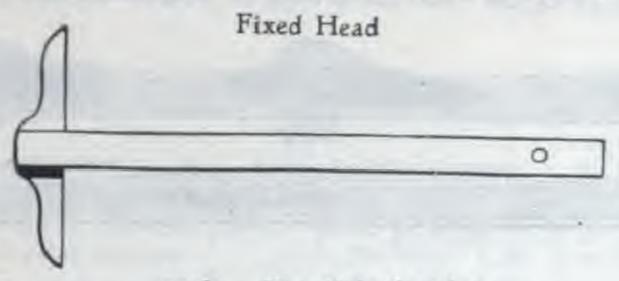
Note. — The above list of T Squares comprise the various patterns and styles mostly in use. Extra T Squares in Fancy Woods either with Fixed or Shifting Heads, at various prices. Also Extra Large T Squares made to order

SWIVELS FOR T SQUARES



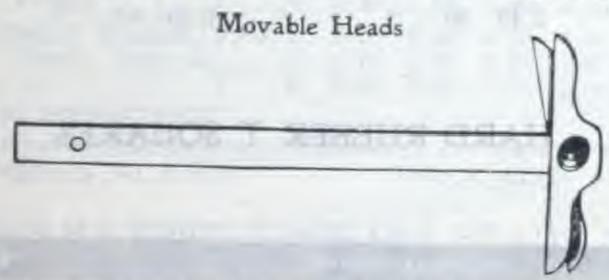
		0.03	0.00		*				
No. 6	37.	Common Sy	wivel, Brass ,		31			each,	.25
			l, Milled Head,					34	.40
6	39.	Fine Swive	l, with Nut and	Washe	r,	Brass		41	.80
			l, with Nut and					- N .	1.00

MAHOGANY EBONY-LINED T SQUARES



8	inches long	+		each,	.85	42	inches long		9	each,	\$1.60
1		*	1.6	1000	.90	48	14			0.11	1.85
14	4.8			4.4	1.00	54			-	-66	2.25
0	11			5.5	1.20	60	14.	1,00		116	3.50
6					1.40	72	1.65			-11	4.50

MAHOGANY EBONY-LINED T SQUARES



4 i	nches	long	14	each,	\$1.75	48	inches long	+		each,	\$2.80
8			100	*4	2.25	60	- 0		*	ii.	3.25
2	11			41	2.50		- 00	*	-	11	5.50

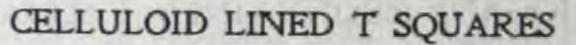
STEEL T SQUARES

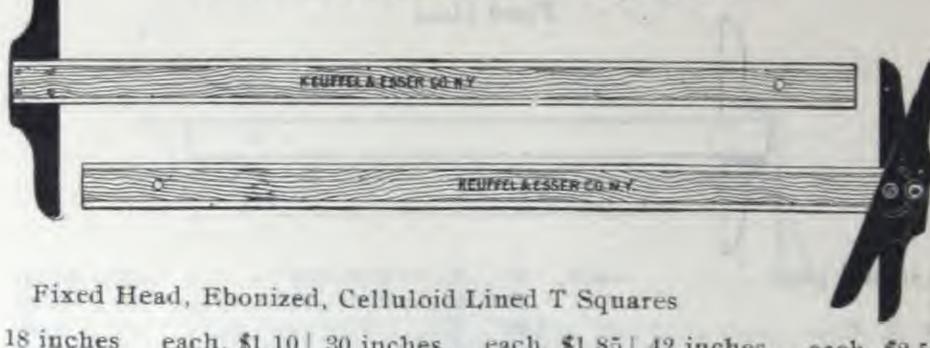
Fixed Head, Japanned Iron; Steel Blade, Nickel Plated

sinches long	1	each, \$3.00 3.50	30 inches long		each, \$4.50
		0.00	100	*	5.50

Movable Head, Japanned Iron; Steel Blade, Nickel Plated

inches long	1	each,	\$4.25	30 inches l	long	¥ .	each, \$5	1.75
			2.000				 1.5	- 10



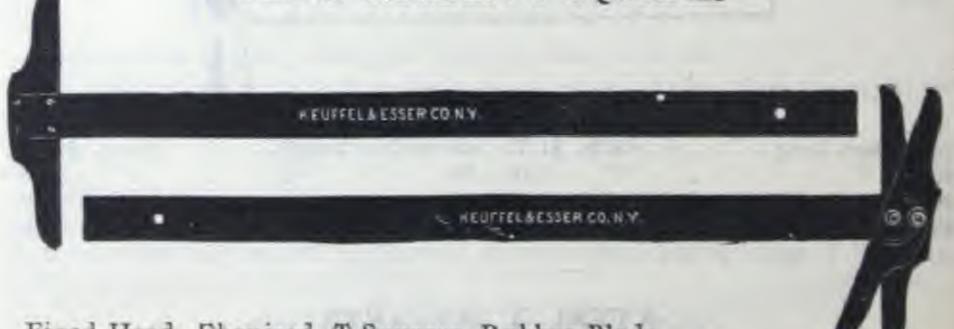


18 inches each, \$1.10 | 30 inches each, \$1.85 | 42 inches each, \$2.50 | 24 '' | 1.50 | 36 '' | 2.15 | 48 '' | 3.00

Shifting Head, Ebonized, Celluloid Lined T Squares, with 2 fine Brass Swivels. The 18 inch Squares have one Swivel

18 inches each, \$1.90 | 30 inches each, \$2.80 | 42 inches each, \$3.60

HARD RUBBER T SQUARES



Fixed Head, Ebonized, T Squares, Rubber Blade

6 i	nches	each	.40]	15 i	nches	each	75	30 i	nches	each,	\$1.60
9	16	10	.50	18	17		.90	36	44	100	2.00
12	6.6	11	.60	24	4.6	44	1.25				

Shifting Head, Ebonized, T Squares, Rubber Blade, with two fine Brass Swivels. Sizes 18 inches and smaller have one Swivel

12 inches	each, \$1.10	18 inches	each, \$1 60	30 inches	each, \$2.50
15 4	1.25		2.00		" 3.00

DEANE'S T SQUARES OF ALL KINDS







Will William Commission III	P.C	grage .				10	0.04	
	2. Shiftin	ng Head,	No Adju	stment	No.	3. Lim	ited Adj	ustment
Maple Walnut Curred		24 in.	30 in.	36 in.	42 In	48 in	Ed la	en i-
Maple, Walnut Curved, Head, Shellac Finish	No. 1.	1.70	1.80	1.90	\$2.30 2.00	\$2.50 2.25	\$2.75	
	3.	1.50	1.60	1.70	1.80	2.00	2.25	2.50
Ashwood, Maple Lined, Walnut Curved Head, Shellac Finish	No. 1. 2. 3.		2.25 1.90 1.75	2.35 2.00 1.85	2.50 2.15 2.00	2.75 2.40 2.25	3.00 2.75 2.50	3.50 3.25 3.00
Mahogany, Ebony Lined, Ebonized Curved Head, Shellac Finish	No. 1. 2. 3.		2.50 2.15 2.00	2.65 2.30 2.15	2.85 2.50 2.35	3.00 2.75 2.50	3.30 3.00 2.75	3.75 3.50 3.25
Mahogany, Amber Lined Ebonized Curved Head, Shellac Finish	No. 1. 2. 3.	3.50 3.15 3.00	4.00 3.65 3.50	4.50 4.25 4.00	5.20 4.75 4.60	6.00 5.50 5.40	7.00 6.50 6.40	8.00 7.70 7.50
Rubber Blade, Walnut, Maple Lined Curved Head	No. 1. 2. 3.	$3.10 \\ 2.75 \\ 2.60$	3.50 3.15 3.00	4.00 3.65 3.50	4.50 4.25 4.00		0,10	1.00
BRASS FITTINGS					2142			

School T Square, Cherry Blade, Curved Head, made in No. 3 only 24 in. 30 in. 36 in. No. 3. \$1.00 \$1.15 \$1.20 \$1.24

DEANE'S PATENT T SQUARE HEADS, NO BLADES

NICKEL FITTINGS	24 in.	30 in.	36 in.	42 in.	48 in.	54 in.	60 in.
Walnut, Maple Lined, No. 1.	\$1.75	\$1.80	\$1.85	\$1.90	\$2.00	\$2.15	\$2.25
or Eponized 2.	1.45	1.50	1.55	1.50	1.70	1.85	1.95
) 3.	1.25	1.30	1.35	1.40	1.50	1.65	1.75
Mahogany, Ebony Lined No. 1.	2.00	2.05	2.10	2.15	2.25	2.40	9.60
2.	1.70	1.75	1.80	1.85	1.95	2.10	9.20
) 3.	1.50	1.55	1.60	1.65	1.75	1.90	2.10
Cherry, Brass Fittings, No. 3,	18 in	., .75	; 24	in., .	85: 3	0 in	95 :

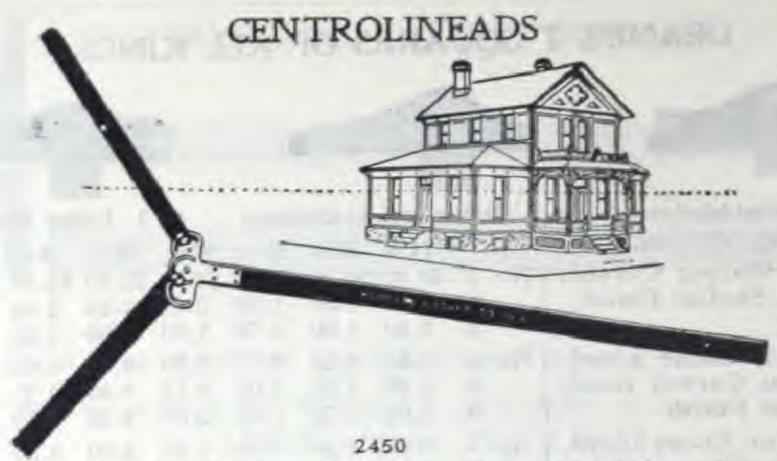
36 in., \$1.00



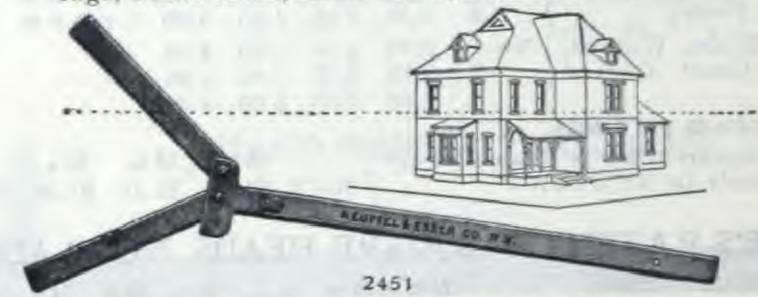
PROTRACTOR, OR "CLIMAX," T SQUARES

NICKEL FITTINGS

Polished	Ebony	Lined	Blades a	nd Heads,	30 in. \$5.50	36 in	42 in.
Mahogany, Heads, Po	Amber olished	Lined	Blades,	Ebonized }	6.50	\$6.00 7.25	\$7.00 8.50



2450. Centrolinead, Ebony, German Silver Mountings,
Blade 42 in., Arms 15 in., 2 Studs . . . each, \$11.00
2450-2. The same as 2450, Hardwood Ebonized, Brass Mountings, Blade 42 in., Arms 15 in., 2 Studs 7.00



Used when vanishing point of a perspective drawing is beyond the drawing board, as follows: Draw a horizontal line (line of sight) and a vertical line crossing it near end toward vanishing point. Place the two studs in this vertical line, equidistant from the horizontal, and about 8 to 16 inches from it, according to size of angle. The angle at which two arms are to be set, is determined as follows: Multiply distance of either of the studs (from horizontal line) by itself divide product by distance of vanishing point from vertical line, and quotient will be distance from vertical line toward drawing, at which centre of head (the point at which lines of inner edges of arms intersect horizontal line) should be placed. For instance, if either stud be 8 inches from horizontal line and vanishing point 24 inches beyond it, then 8×8=64 divided by 24=2\frac{1}{2}\$ i. e. the point of intersection should be placed 2\frac{1}{2}\$ inches from vertical line toward drawing

"THE ACADEMIC" DRAWING OUTFIT



Outfit contains velvet-lined leather case with all German Silver Instruments. One Compass, 5½ in., with Pen Point, Loose Needle Point Pencil Point, Lengthening Bar; One Bow Pen, 3½ in., with Metal Handle; One Ruling Pen, 5½ in., with Steel Points and Ebony Handle; One Adjusting Key; One Box of Extra Leads for Compass

One Drawing Board, 161/2 × 221/2 in. One Pear-Wood T Square, 221/2 in.

One 6 in. Protractor

One 7 in. 45 degrees Transparent Celluloid Triangle One 8 in. 60 degrees Transparent Celluloid Triangle

One 12 in. Boxwood Triangular Scale, divided 15, 32, 1, 1, 1, 1, 1, 2, and 3 in. to foot and one edge 16 to inch

One Transparent Celluloid, Irregular Curve

Thumb Tacks

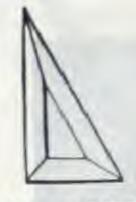
One Drawing Pencil

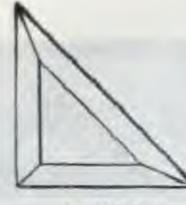
One 34-oz. bottle Waterproof Drawing Ink

One Ink and Pencil Eraser

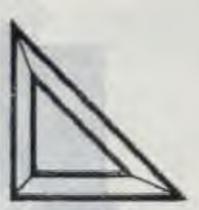
One-quarter dozen Sheets Drawing Paper, 15 × 20 in.

FROST & ADAMS CO'S PEARWOOD TRIANGLES









30 x 60 DEG.

45 DEG.

30 x 60 DEG.

45 DEG.

Pearwood Triangles, framed, 30×60 degrees

4 i	nches	*	each,	.10	9 i	nches	4	4.		each	.27
5	**		KI	.12	10	44	2.	2 11	-	44	.30
6	194		70	.15	11	**				3.8	.35
7	91		ile	.20	12	4.7	-			- 11	.38
8	11		11	.25	14	4.6				3.6	.40

Pearwood Triangles, framed, 45 degrees

4 it	ches			each	, .10	9 i	nches	*			each	, .30
5	11		,	31	.12	10	44	4		-	4.6	.30
	160	4		2.6	.15	11	19				18.4	.35
	ike:			41	.20	12	4.6		æ	4	441	.40
8	10				.25	14	41				9.5	.45

BAR FOR BEAM COMPASSES



Hardwood Bars for Beam Compasses

24 is	nches	2.		each,	.25	42 i	nches	4		each.	.40
30	3.6		4.	4.6	.30	48	41	1511	+		.50
36	11			**	.35	60	15			110	.65

3.00

FROST & ADAMS CO'S HARD RUBBER TRIANGLES





Ha	rd Rubber	Tris	ingle	s, 30×6	0 deg	grees				
4 in	ches long	16.	12	each,	.20	11 in	ches long		eacl	1, .75
5	10			16.	.25	12	44		44	.90
6	11	1		61	.30	13	14	4	41	1.00
7	11)			44	.35	14	1.6		41	1.25
8	660		20	7.6	.45	15	14		41	1.40
9	24			110	.55	16	11		17	1.50
10	11.			44	.65	17	16		ri.	1.75
На	rd Rubber	Tris	ingle	s, 45 de	gree	s 18	-11	2	46	1.90
4 in	ches long			each,	.25	11 in	ches long	47	each,	\$1.10
5	44			11	.35	12	K.6.		4.1	1.30
6	110		4	31	.45	13	8.4		4.0	1.60
7	1.6	*		14	.50	14	£k.		11	1.85
8	44			3.6	.65	16			 -61	2.15
9	110			141	.75	16	16		61	2.50
10	66			0	.95	17	11		2 11	2.70

RUBBER PROTRACTORS

18

Circula	r Rubber	Protractor,	6	inches	Diameter.	1/2	Degrees	each,	\$3.75
14	10	**	8	44		1/2	4.0	- 11	5.00
a	- 11	16	10	4.4	**	1/2	6.0	11.	16.00

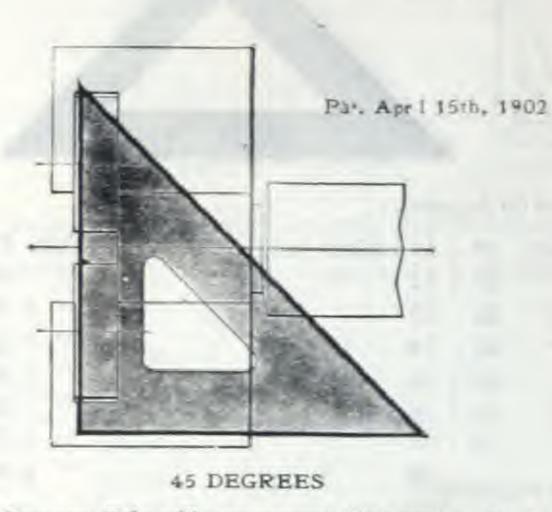
COPENHAGEN SHIP CURVES OF HARD RUBBER

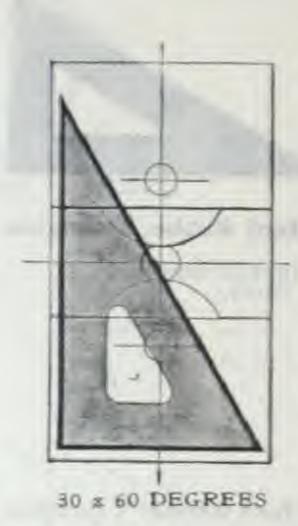
120 Curves, in Walnut Case	14		90		per set, \$65.00
Separate Curves,		175		The same	each .80 to 1.50

The above made of Celluloid, if desired

FROST & ADAMS CO.'S OPAQUE EDGE, TRANSPARENT TRIANGLES

Cellu'cid





Opaque Edge Transparent Triangles, 45 degrees

4	inches	-	4	*	cach	50	111	inches		-		each,	\$1.20
ã					4.5	.65	12	44			-	11.	1.40
6	11	7			44	.75	13	111	2			11	1.70
7	11	8	4		44	.85	14	48			41	11	2.00
8	1.4		+	4	41	1.00	15	400			4	14	2.40
0	2.65		-	*	11	1.20	16	18		4	+	3.6	2.75
10	110				4.0	1.40							

Opaque Edge Transparent Triangles, 30 x 60 degraes

4 i	nches				cach	40	11 3	nche	s .			each.	\$1.70
(i)	4.5	-	4		4.0	.45	12	18		1 10		4.9	2.00
G	4.5	91	-		14	.50	13	4.9				X÷	2.40
7	31				8.6	.05	14	14	100			- 17	2.75
8	3.1	-		,	10	.75	15	5.6				19.	3.10
0	11		-	4	3.6	.85	16	160				KR	3.60
10	3.6				11	1.00	200				- 17		4577

Made from Extra Heavy Seasoned Celluloid. Accuracy Guaranteed

These triangles differ from ordinary transparent triangles in that the transparent material at the edges is, by a novel method, rendered opaque, resulting in a sharply defined border a scant in inch in width, which, contrasting strongly with the drawing surface, facilitates the adjusting of the working edges to existing lines

FROST & ADAMS CO.'S CELLULOID TRIANGLES





Celluloid Triangles, 30×60 degrees

3 in	n. long	201	each	, .20	8 in	n. long	each	1, .55	13 is	n. long	each,	\$1.25
4	11		66	.25	9	16	11	.65	14	"	16	1.65
5	16		46.	.35	10	4.6	166	.75	15	**	16	2.00
6	11		**	.40	11	2.0		.85	17		16	$\frac{2.50}{3.00}$
7	11	1	11	.45	12	16	61	1.00		14	11	3.50

Celluloid Triangles, 45 degrees

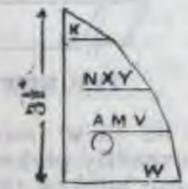
3 it	a. long	each	, .30	8 in	n. long		each,	.75	13 in.	long	each,	\$1.90
4	11	-61	.35	9	16		11	.95	14	**	16	2.20
75	11	4.0	.45	10	11	ä	111	1.10	15 -	14	11	2.65
*			.40	10				1.10	16	64	11	3.15
6	33	16	.55	11	16	i	16	1.35	17	16	16	3.65
7	4.6	1.6	.65	12	1.c		44	1.65	18	10	44	4.15

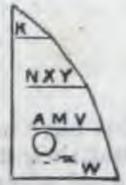
CELLULOID LETTERING TEMPLETS AND TRIANGLES

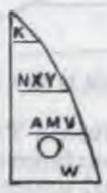


Celluloid Lettering Templets, 3 in set

per set, \$2.00







Celluloid Lettering Triangles, 3 in set

per set, \$1.50

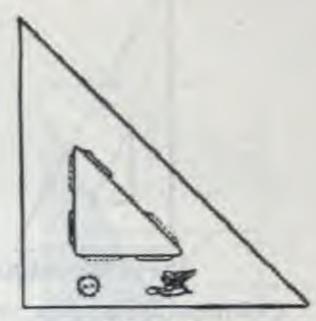
FROST & ADAMS CO.'S IMPROVED CELLULOID TRIANGLES



NO. 1855 30x60 DEGREES



NO. 1855-1 22% x 67% DEGREES



NO. 1856 45 DEGREES

No. 1855. Improved Celluloid Triangles, 30×60 degrees

4 in.		each,	.25	8 in.		each,	.55	12 in.	4	each, \$1.00
5 "		-16	.35	9 11		14		13 "		1.25
6 "	4	1.0	.40	10 "		11	.75	14 "	,	" 1.65
7 "		**	.45	11 "		11	.85	16 "		" 2.50

No. 1855-1. Improved Triangles, 22 1/2 × 67 1/2 degrees

-	 -	1			3	4	A	4.2		
4 in.		each,	.25	10 in.			each, .75	14 in.		each, \$1.65
6 "		14	.40	12 "			1.00	16 "		2.50
8 11		**	.55	1				100		

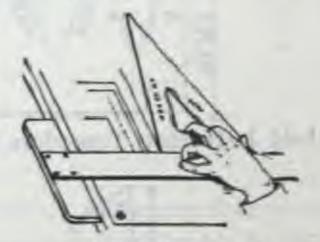
No. 1856. Improved Triangles, 45 degrees

4 in.			each.	.35	8 in.		4.	each	. 75	12 in.	*	4	each, \$1.6	5
5 **	-	12			9 11	4	14	5.7	.95	13 "	1	140	" 1.90	0
6 11	-	-	4.5	.55	10 "	4	-			14 "			2.20	0
7 "			10	.65	11 "	14		11	1.35	16 "		1	" 3.1	5



THE OLD WAY

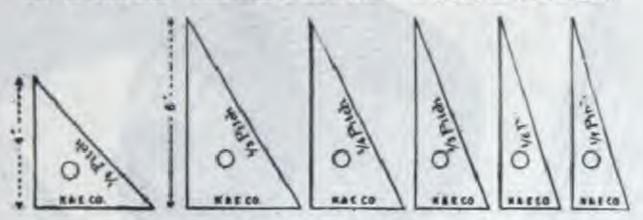
Percent, At A



THE NEW WAY

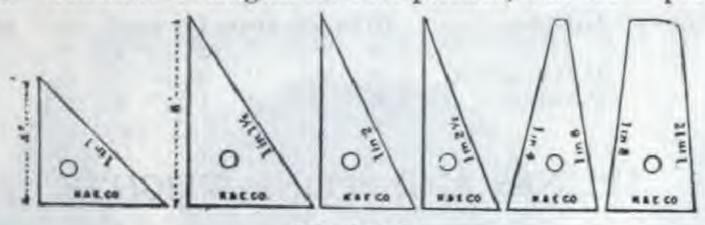
Improved Celluloid Triangles have bevels on their inner edges from opposite faces (surfaces) so that they can be readily picked up by catching the finger nail under the bevel when taking hold of them

FROST & ADAMS CO.'S SPECIAL CELLULOID TRIANGLES



NO. 1857A

No. 1857A. Celluloid Triangles for roof pitches, 6 in set per set, \$3.00



NO. 1857B

No. 1857B. Celluloid Triangles for embankments,

8 slopes on 6 templets per set, \$4.50

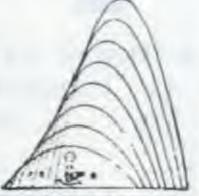
CELLULOID ELLIPSES, HYPERBOLAS, PARABOLAS



NO. 1862B



NO. 1862



NO. 1862C

No. 1862. Celluloid Ellipses, set of 10 major axis,

11/2 to 6 in. (by 1/2 in.) per set, \$3.50

1862A. Celluloid Ellipses, set of 6, major axis,

2 to 41/2 in. (by 1/2 in.) per set, 2.25

1862B. Celluloid Hyperbolas, set of 8,

height 2 to 51/2 in. (by 1/2 in) per set, \$2.75

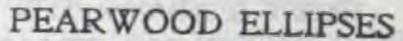
1862C. Celluloid Parabolas, set of 8,

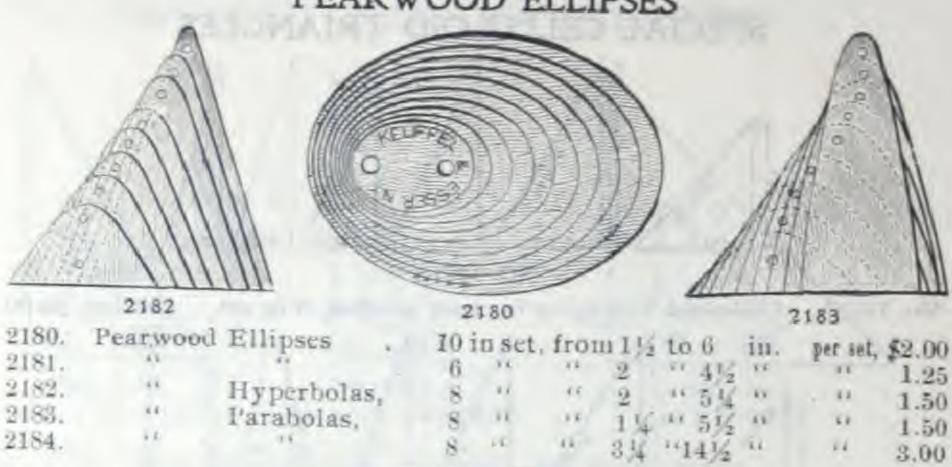
height 11/4 to 5 % in. (by 1/8 in.) per set, 2.75

1862D. Celluloid Parabolas, set of 8,

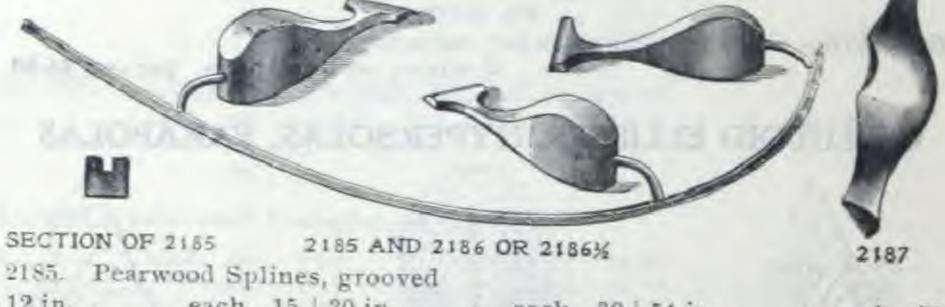
height 31/2 to 14 in. by 11/2 in.) per set, 6.00

The ratio of the axes of Ellipses is 3:4. Both axes engraved correctly
The Hyperbolas and Parabolas have 4 in. base

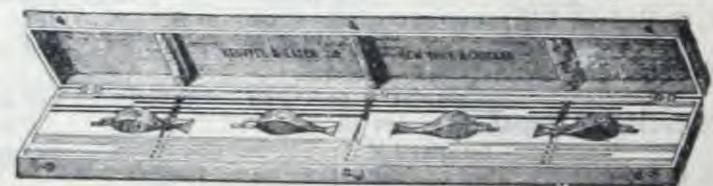




SPLINES AND SPLINE WEIGHTS



2185.	Pearw	rood Sp	lines	groove	d					1	
12 in. 18 " 24 "		each,	.15 .20 .25	30 in		48	.40	60 "		- 11	70 .80
2186. 2186½	Lead	Weight	s for	Splines	, with	h finger,	abou	at 34	pounds	each,	
2187.		16	ct	(t	по	ti			ounds pounds	0	1.25



2190. Set of 4 Spline Weights, No. 2186, Hard Rubber Splines, 1 each No. 1835, 12, 18, 24, 30, 36, 42, inch, Pearwood Splines, 1 each No. 2185, 12, 18, 24, 30, 36, 48 inch, in strong Wooden Box per set, \$10.00

5.00

LOGARITHMIC SPIRAL CURVE



1828.

1829.

1822. Logarithmic Spiral Curve with Directions each, \$1.50 Directions for Logarithmic

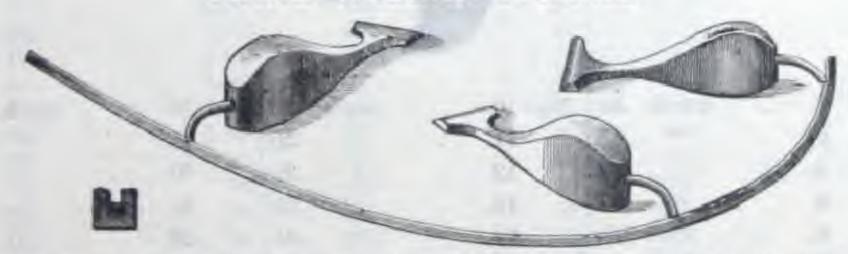
Spiral Curve each, .20

The Curve is mathematically constructed and contains every curve within the limit of its size. If properly used according to the directions accompanying each, the most difficult calculations can be made with it

HARD RUBBER ELLIPSES, ETC.



HARD RUBBER SPLINES



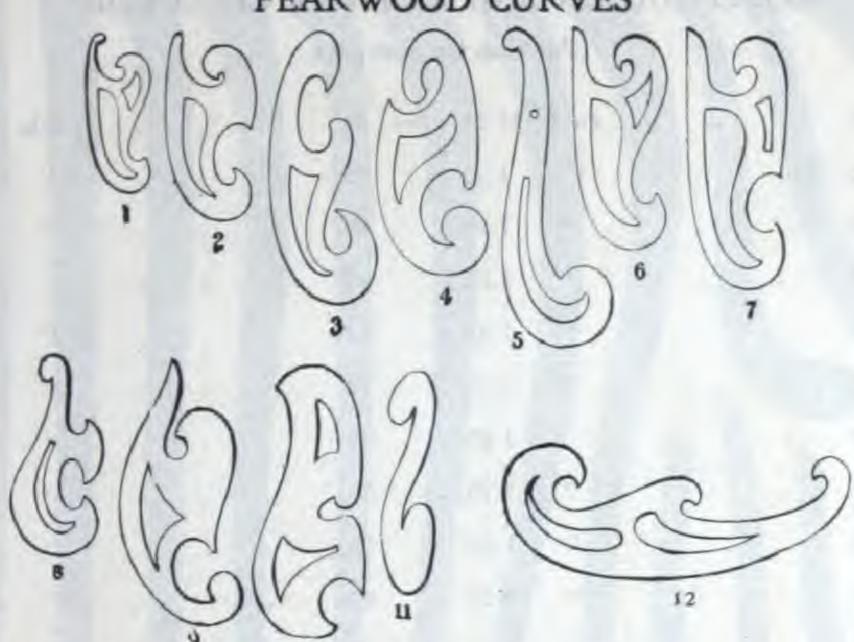
12 inch each, .30 | 24 inch each, .45 | 36 inch each, .55 | 43 inch each, .75 .50 42 " " .60 54 " .35 | 30 11 each, \$1.10 72 inch each, \$1.00 60 inch

These Splines have a small groove, as shown in the section, to admit the finger of the weights which hold them in position

FROST & ADAMS CO'S HARD RUBBER CURVES

No.	1.		each	.35	No. 10.	,	each,	.20	No. 19.		each	.50
	2.		0.	.35	11.		4.6	.20	20.		44	.50
	3.		4.9	.50	12.	4	8.8	.30	21.		14	.45
	4.	+	.44	.50	13.		11	.50	22.		14	.35
	5.		14	.40	14.			.35	23.		16	.40
	6.		180	.35	15.		0	.45	24.		316	.60
	7.		11.45	.30	16.		11/	.35	25.		12	.40
	8.		0.	,25	17.		11	.35	26.	-6-01	14	.35
	9.	1	**	.25	18.	*		.40		Specia	1 11	.40

PEARWOOD CURVES



Pearwood Curves, fine finish

No.	1.		each,	.20	No.	5.	4	each,	.30	No. 9.	+	each, .30
	2.		11	.25		6.		5.6	.25	10.		.35
	3.		11	.30		7.		2.6	.30	11.		.20
	4.	P.	8.6	.30		8.		16	.25	12.	4	.35

PEARWOOD SHIP CURVES

No. 32.	each.	\$1.00	No.	63.	each,	65	No. 107.	each	, .45
34.	44	1.00	-77	65.	- 0	.65	113.	14	.35
36.	. B.K.	1.00		66.	0.	.45	114.	4.6	.45
38.	4.0	1.00		69.	14	.45	115.	(0	.35
40.	4.6	1.00		74.	66	.45	119.	44	.45
43.	41	1.00		78.	81	.45	121.	14.	.30
45.	46	1.00		81.	66	.45	129.		.35
47.	44.	1.00		82.	66	.45	130.	6.0	.45
48.	u	.85		83.	4.6	.45	131.	5.6	.35
50.	*4	.70		87.	11.	.50	137.		.25
53.	44	.50		89.	ti.	.60	140.	11	.35
55.	**	.70		90.	- 11	.50	144.	4.6	.35
59.	44	.70		94.	.0	.45	148.	10	.35
60.	46	.70		98.	- 10	.45	149.	**	.35
62.	**	.65		102.	16 -	.35	151.	10	.45

Set of 45 Pearwood Copenhagen Ship Curves, containing 1 curve each as listed, in hardwood case . . . per set, \$25.70

COPENHAGEN SHIP CURVES, CELLULOID

(For Cuts see next page)

No. 1.		4.		each	\$1,25	No. 24.				eacl	1, .75
2.				**	1.25	25.				We	.75
3.		4		10	1.25	26.	y .		.1	-	.75
4.		- 7		16	1.25	27.	-			11	.75
5.				n	1.25	28.		4		46	.50
6.			+	16	1.25	29.	1		10	0	.50
7.	+			11	1.25	30.	1	4		1	.50
8.			4	- 10	1.25	31.		- 20		**	.50
9.	9	-		16	1.25	32.			4	11	.50
15.		E		15	1.25	33.				41	.50
10.	10	7		31	1.00	34.	1			20	.50
11.		-		ii.	1.00	35.				**	.50
12.	4	2	1	ii.	1.00	36.				ev -	.50
13.	+	7		41	1.00	37.				**	.50
14.		4		44	1.00	38.		10	5.	. 11	-50
16.				12	1 00	39.	4		+	11	.50
17.	-			(4)	.75	40.			(2)	11	.50
18.	4	+		11	.75	41.		4	5		.50
19.				-10	.75	42.	, 1		4		.50
20.				193	.75	43.		,			.50
21.				192	.75	44.			t	its.	
22.				33	.75	45.	, 171			20.	
23.	i		ign)	(8)	.75	1 -20-1					



For prices see page 302

FROST & ADAMS CO'S CELLULOID CURVES

		3000	3	7	3	500000	OF THE STATE OF TH		C530 "	2	
	3 (F	3			5	3)(50	300	0	5	
No. 1.	6	19	20	21			24 2	6		27	
2.				each		No. 16.		1	*		h, .35
		7		46.	.50	17.	1		+	41	.50
3.		*		66	.65	18.	12		1 .	16	.30
4.		19.	2	44	.65	19.	2		-	40	.60
5.		- 1	130	16	.55	20.				- 11	.75
6.		3		in	,50	21.			10	**	.60
7.		*	0		.40	22,	-	k	10	34	.50
8.	5.1		-81	24	.40	23.	-5	4		44	.50
9.		*		-11	.35	24.			3	- 11	.75
10.		10		16	.30	25.	- 10		P()		.35
11.	-	2	-	-10	.30	26.	100			AK.	.50
12.	*			6.6	.35	27.		+		-84	.90
13.		2	45	4.0	.65	28.	114	-	-	44	.90
14.			4/-/	44	.40	26.	Special	*		14	1.80
15.		1	4-	**	.50						

FROST & ADAMS CO.'S PEARWOOD RAILROAD CURVES



No. 2200. Pearwood Railroad Curves, 10 in set, viz.: 12, 24, 36, 48, 60, 72, 84, 96, 108, 120 inch radius . . set, \$3.50

2202. Pearwood Railroad Curves, 17 in set, viz.: 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60 inch radius set, 6.00

2204. Pearwood Railroad Curves, 44 in set, viz.: 3, 3½, 4, 4½, 5, 5½, 6, 6½, 7, 7½, 8, 8½, 9, 9½, 10, 12, 14, 16, 18, 20, 22, 24, 27, 30, 33, 36, 39, 42, 48, 54, 60, 66, 72, 78, 84, 90, 100, 110, 120, 130, 140, 160, 180, 200 inch radius set,12 00

Put up in a Wood Case

No. 2208. Pearwood Railroad Curves to any scale, to order each, .45 2209. " with Tangent " .60

These Curves are made of genuine Pearwood, by special machinery, and are warranted to be correct. They are the same on both edges, so that either edge can be used

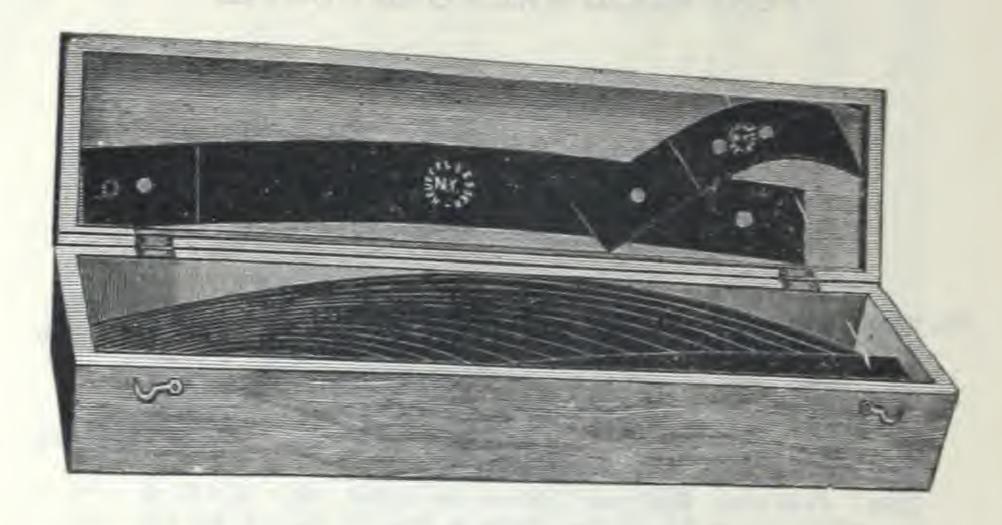
CARD BOARD RAILROAD CURVES

No. 2210. Card Board Railroad Curves, 30 in set, viz.: 1½, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 35, 40, 45, 50, 60 inch radius . . . set, \$5.25

2211. Card Board Railroad Curves, 50 in set, viz.: 1½, 2, 2½, 3, 8½, 4, 4½, 5, 5½, 6, 6½, 7, 7½, 8, 8½, 9, 9½, 10, 10½, 11, 11½, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, set, 8.50 110, 120 inch radius

Put up in a Wood Case

HARD RUBBER RAILROAD CURVES



No. 1840.	Hard Rubber Railroad Curves, 10 in set: 12, 24, 36, 48, 60, 72, 84, 96, 108, 120 inch radius, in wooden box
1941	per set, \$1.70
1841.	Hard Rubber Railroad Curves, 17 in set: 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57,
	60 inch radius, in wooden box
1842.	Hard Rubber Railroad Curves, 40 in set: 3, 4, 5,
	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18, 21, 24, 27, 30,
	33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 66, 72, 78, 84,
	90, 96, 102, 108, 114, 120 inch radius, 1 curve 1 deg.
	to 100 foot scale, 57.30 inch, 1 curve 2 deg. to 100
	foot scale, 28.65 inch, in wooden box
1845.	Hard Rubber Railroad Curves with Tangent, 55 in
	set: 3, 3½, 4, 4½, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14,
	15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28,
	30, 32, 34, 35, 36, 38, 40, 45, 50, 55, 60, 65, 70, 75,
	80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180,
	190, 200 inch radius, in wooden box

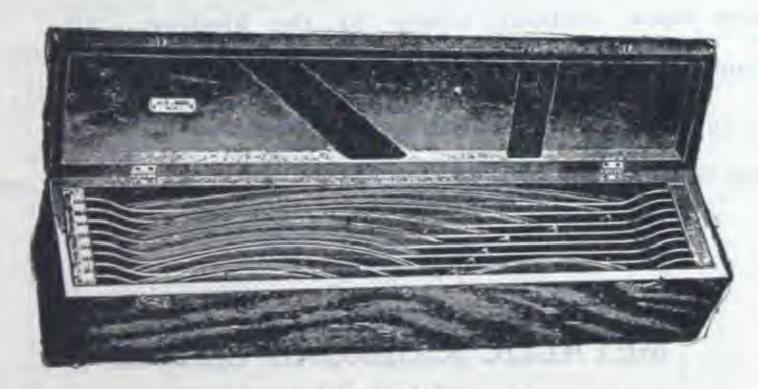
FROST & ADAMS CO.'S

CELLULOID RAILROAD CURVES

No. 1891.	C	ellu	loid	Ra	ilro	ad (Cur	ves,	17	in s	et, v	iz.	: 12,	15, 18	,
	21,	24,	27,	30,	33,	36,	39,	42,	45,	48,	51,	54,	57, 60) inc	h
	rad	ius				V									. set, \$15.00

1891A. Celluloid Railroad Curves, 30 in set, viz.: 1½, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 35, 40, 45, 50, 60 inch radius . set, 27.50

1891B. Celluloid Railroad Curves, 50 in set, viz.: 1½, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6, 6½, 7, 7½, 8, 8½, 9, 9½, 10, 10½, 11, 11½, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 110, 120 inch radius set, 42.00



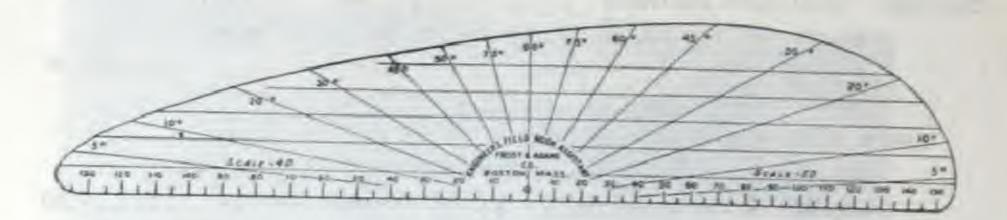
NO. 1891C

No. 1891C. Celluloid Railroad Curves, with Tangent, 55 in set, viz.: 3, 3½, 4, 4½, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 32, 84, 35, 36, 38, 40, 45, 50, 55, 60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200 inch radius set, \$55.00

Put up in Improved Partitioned Cases (except set 1891 has no partitions)

FROST & ADAMS CO'S

ENGINEERS' FIELD BOOK ASSISTANT



The Engineers' Field Book Assistant combines in itself a straight edge, irregular curve, parallel ruler, protractor and scale. It is made of transcript celluloid, thin enough to enable its being carried between the leaves of a note book without injury to the binding. All Engineers who appreciate the advantage of clear, complete and neat field notes will readily perceive the value of this simple little instrument.

each, .50

METALLIC RAILROAD CURVES



PATENT NOV. 21, 1893

See next page for sizes and prices

Metallic Railroad Curves - Continued STANDARD SET NO. 1

100 curves stamped with radius in inches as follows:

0	AV	7 1	9%	12	161/2	211/2	28	38	70
2	4 1/2	71/	934	1214	17	22	29	40	80
2.74	434	734	10	121/2	171/2		30	42	90
272	514	71/2	1034	13	18	221/2	31	44	100
234		734	101/2	131/2	181/2	231/2	32	46	120
2¼ 2½ 2¾ 3 3¼	51/2	8			19	24	33	48	140
3,4	534	814	1034	14/2	191/2	241/2	34	50	160
3½ 3¾	6	81/2	1114		20	25	35	55	200
334	614	834	A SOUTH OF A STATE OF	151/2	201/2	26	36	60	240
4	61/2	9	111/2	16	21	27	37	65	300
414	634	914	1134	10	41				

THE CHANGE LEMIT STRIMING SECTION AT	per set,	
75 Curves selected "ad lib" from Standard Set No. 1	**	18.75
50 Curves selected "ad lib" from Standard Set No. 1	44	14.00
25 Curves, selected "ad lib" from Standard Set No. 1	2.0	8.00

STANDARD SET NO 2

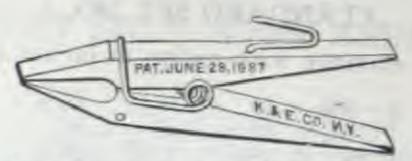
102 Curves stamped in degrees and inches to 100 foot scale, as follows:

```
=5.22
                                                                     30' = 3.48
                                                 110
                                                                160
                                  6° 15'=9.17
                 2° 40'=21.49
0^{\circ} \ 15' = 229.18
                                  6° 30'=8.82 | 11° 15'=5.10
                                                                        =3.38
                                                                170
                 2° 50'=20.22
6^{\circ} \ 20' = 171.89
                                  6° 45'=8.49 11° 30'=4.99
                                                                     30' = 3.29
                                                                 170
                 30
                        =19.10
6^{\circ} \ 25' = 137.51
                                                                 18°
                                                 11° 45'=4.88
                                                                        =3.20
                                   7^{\circ} = 8.19
                 3° 10'=18.10
0^{\circ} \ 30' = 11 \ .59
                                                                 18° 30'=3.11
                                  7^{\circ} \ 15' = 7.91 \ 12^{\circ} = 4.78
                 3° 20'=17.19
0^{\circ} \ 35' = \ 98.22
                                   7° 30'=7.64 | 12° 15'=4.69
                                                                        =3.03
                                                                 190
                 3° 30'=16 37
0° 40'=
         85.94
                                                                 19° 30'=2.95
                                                 12^{\circ} 30' = 4.59
                                   7° 45'=7.40
                 3° 40'=15.63
         76.39
0° 45'=
                                                 12° 45'=4.50
                                                                        =2.88
                                                                 200
                                         =7.17
                 3° 50'=14.95
         68.76
0° 50'=
                                                                 21°
                                                                        =2.74
                                   8° 15'=6.95
                                                 13°
                                                         =4.42
                        =14.33
0° 55'=
         62.60
                                                                 220
                                                                        =2.62
                                                 13^{\circ} 15' = 4.33
                                  8° 30'=6.75
                 4° 10'=13.75
         57.30
     =
                                                                        =251
                                                                 23°
                                                13° 30'=4.25
                                   8° 45'=6.55
                 4° 20'=13.23
         49.11
1° 10'=
                                                                        =2.40
                                                 13° 45'=4.18
                                                                 24°
                                         =6.37
                                   90
                 4^{\circ} 30' = 12.74
         42.97
10 20'=
                                                                 25°
                                                                        =231
                                                 140
                                                         =4.10
                                   9° 15'=6.20
                 40 40 = 12.28
1° 30'= 38.20
                                                                 26°
                                                                        =2.22
                                  9° 30'=6.04 | 14° 15'=4.03
                 4° 50'=11.86
1° 40'=
         34.38
                                                 14° 30′=3.96
                                                                 270
                                                                         =2.14
                                   90 45'=5.88
                        =11.46
         31.25
1° 50'=
                                  10° =5.74 | 14° 45′ = 3.90 | 28°
                                                                         =2.07
                  5° 15'=10.92
          28.65
                                                                         =2.00
                                                         =3.83
                                                                 290
                                  10° 15'=5.60
                                                 15°
                  5° 30'=10.42
2° 10'=
          26.45
                                                                         =1.93
                                                 15° 30'=3.71
                                                                 300
                                  100 30 = 5.45
                  5° 45'= 9.97
2° 20'=
          24.56
                                                 16°
                                                         =3.59
                                  10° 45'=5.34
                        = 9.55
          22,92
2° 30'=
```

TOUR COMMING FROM STREET STREET STREET STREET STREET STREET		\$25.00
102 Curves (Full Standard Set No. 2) 75 Curves, selected "ad lib" from Standard Set No. 2	6.6	20.25
50 Curves, selected "ad lib" from Standard Set No. 2	44	15.00
25 Curves, selected "ad lib" from Standard Set No. 2	"	8.75

Special templets of any other sizes than above enumerated can only be furnished subject to delay and at greatly increased cost

SPRING CLIPS



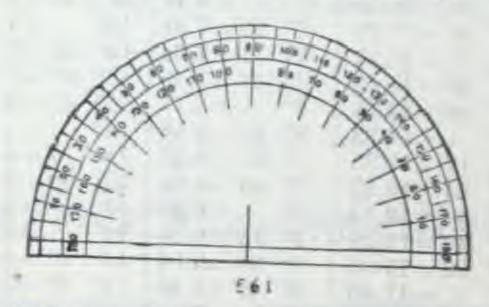
249-3. Spring Clips for Clamping Prints when Drying

per dozen, .25

PAPER PROTRACTORS

	110	Drawin	ble Traci g Paper,	11 :	diam		diam., 2	neg.		rach,	-30
	16	20 14 11	g rapel,	14 111.	mari,	14:	degree	100	1.4	**	.30
		Bristol	Board,	14	E4	36	16			(E	30
	17	11	11	9	27	20	11		7		-40
C	. tatour v			0		/2				114	.20
Sen	ilcircul:	ar, on Bri	stol Boar	d,5	3.6	34	41			72.5	70
Sem	icircula	ar, on Bri	stol Boar	d,5	a	35	" wit	h Dia	g-		-10
	onal Sc	ales of in	ches to T	onth, a	nd mil	lim	eter .			16	15

HORN PROTRACTORS



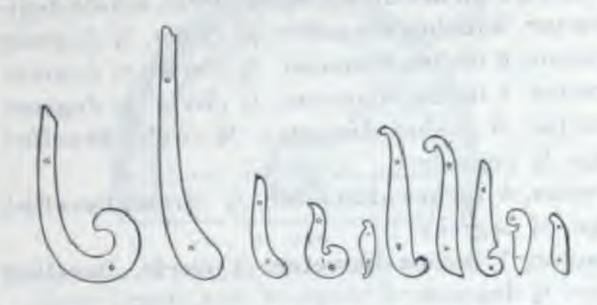
No. 559.	Railroad Curve Protractor, 8 inches diameter, having laid off on it twenty-three curves, from 1/2 degree to 8 degrees, with a radius of 400 feet to the inch	
560.	Protractor, 4 inches diameter, 1/2 circle, whole deg.	each, \$1.60
561.	Protractor, 5 inches diameter, 1/2 circle, whole deg.	.15
562.	Protractor, 6 inches diameter, 1/2 circle, 1/2 degrees	
568.	Protractor, 7 inches diameter, 1/2 circle, 1/2 degrees	-90
564.	Protractor, 8 inches diameter, 1/2 circle, 1/2 degrees	.50

FROST & ADAMS CO.'S

CELLULOID SPLINES, GROOVED

*	85 40 50	42	11	 8	each,	.70.	54 in. 60 '' 72 ''	100	each,	\$1.00 1.10 1.15
	55	200								

CELLULOID ENGINEERS' CURVES, IN SETS

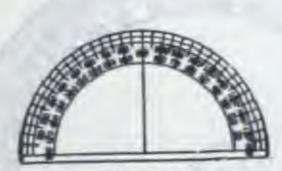


No. 1863. Celluloid Curves for Mechanical Engineers . per set, \$4.80 Set of 10, put up in a Wood Case

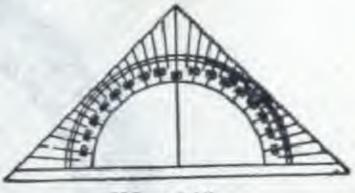
CELLULOID PROTRACTORS



NO. 1866 30 x 60 DEGREES



NO. 1868 SEMI-CIRCULAR



NO. 1867 45 DEGREES

CELLUL OID DEOTRACTOR TRIANGLE

No. 1866.	5 in.,	divided	to 1°	each,	.45	No. 1867. 5	in.,	divided to	1	each,	.70
04.00	8 "	11	1		.50		1 44	- 10	1		.90

CELLULOID SEMI-CIRCULAR PROTRACTOR

11/11/11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1	No. 1868.	4 4 1 1/2	46 .45		led to 1/2 each, .75
--	-----------	-----------	--------	--	----------------------

BRASS PROTRACTORS

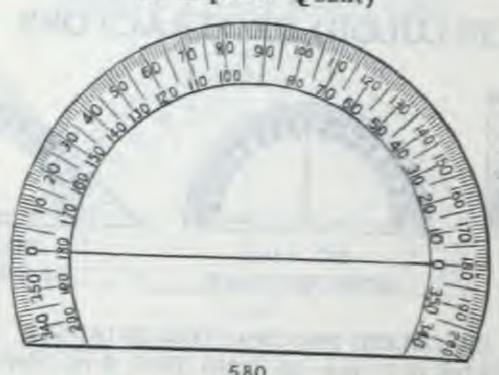
No. 565.	thenes diameter & circle whole de-	.10
	and the fine the state of the s	35
001.	Potractor, a inches diameter 1/2 circle 1/ down	
568.	Protractor 6 inches diameter 1/ : 1 degrees	.55
	Protractor, 6 inches diameter, 1/2 circle, 1/2 degrees "	.65

GERMAN SILVER PROTRACTORS

	SELVER PROTRACTORS		
No. 569.	Protractor, 4 inches diame er Wairele - 1	S.A.	
570.	Protractor, 5 inches diameter, 1/2 circle, whole degrees		50
571.	Protractor 6 inches diameter, 72 circle, 1/2 degrees	1.0	.85
572.	Protractor, 6 inches diameter, 1/2 circle, 1/2 degrees	14	1.00
	A TOTAL COOK, I TUCKES Migmeter 1/ minute 1/ 7	376	1.15
	Edge, 1/2 degrees		
574.	Protractor, 6 inches diameter, 1/2 circle, Bevelled Edge, 1/2 degrees		1.25
575.	Protractor, 7 inches diameter, 1/2 circle, Bevelled	**	2.00
	Edge, ½ degrees	10	2.65

GERMAN SILVER SWISS PROTRACTORS

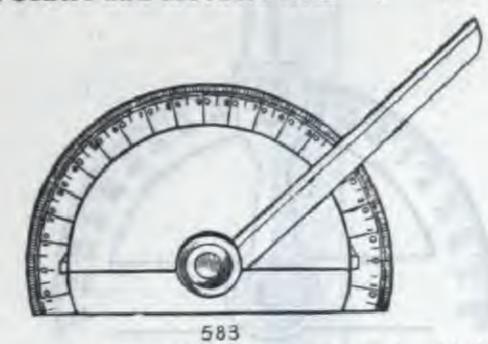
Of Superior Quality

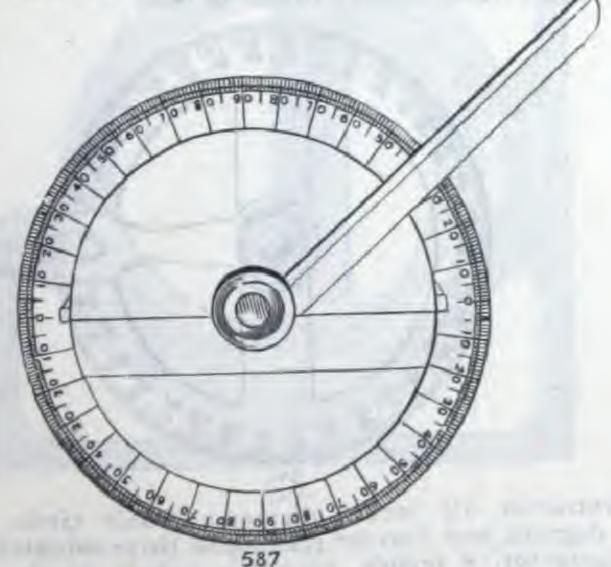


580 No. 578. Protractor, 4 inches diameter, 1/2 circle, whole degrees each, \$1.90 Protractor, 5 inches diameter, 1/2 circle, 1/2 degrees 577. 2.50 578. Protractor, 6 inches diameter, 1/2 circle, 1/2 degrees 3.20 579. Protractor, 6 inches diameter, 1/2 circle, 1/4 degrees 3.90 580. Protractor, 5 inches diameter, 1/2 circle, 1/2 degrees 3.00 581. Protractor, 6 inches diameter, 1/2 circle, 1/2 degrees 3.50 Protractor, 6 inches diameter, 1/2 circle, 1/4 degrees 582. 4.50

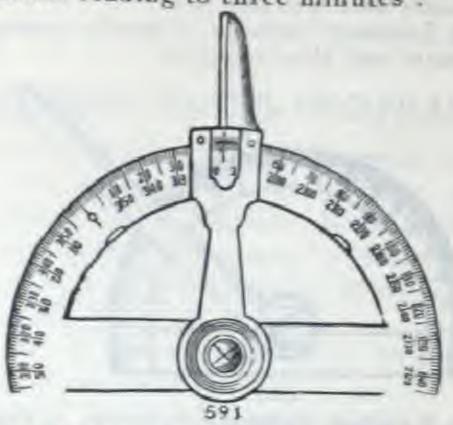
German Silver Swiss Protractors - continued

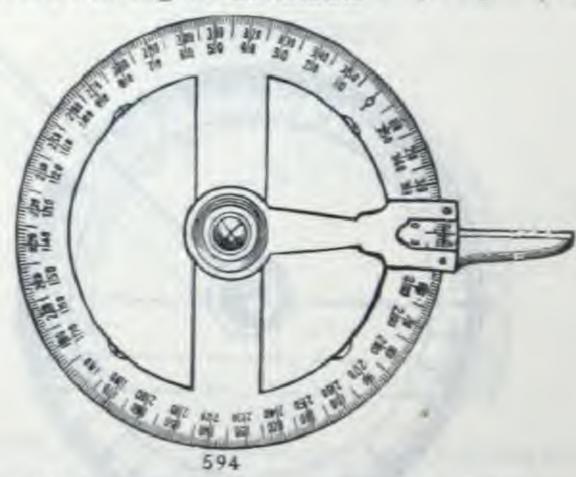
No. 583.	TIOTH COURT MAN AND THOUSE THE	each,	\$6.50
584.	Protractor, 6 inches diameter, ½ circle, ½ degrees, Horn Centre and Movable Arm	ir.	7.50
585.	Protractor, 7 inches diameter, 1/2 circle, 1/2 degrees, Horn Centre and Movable Arm	-11	9.00





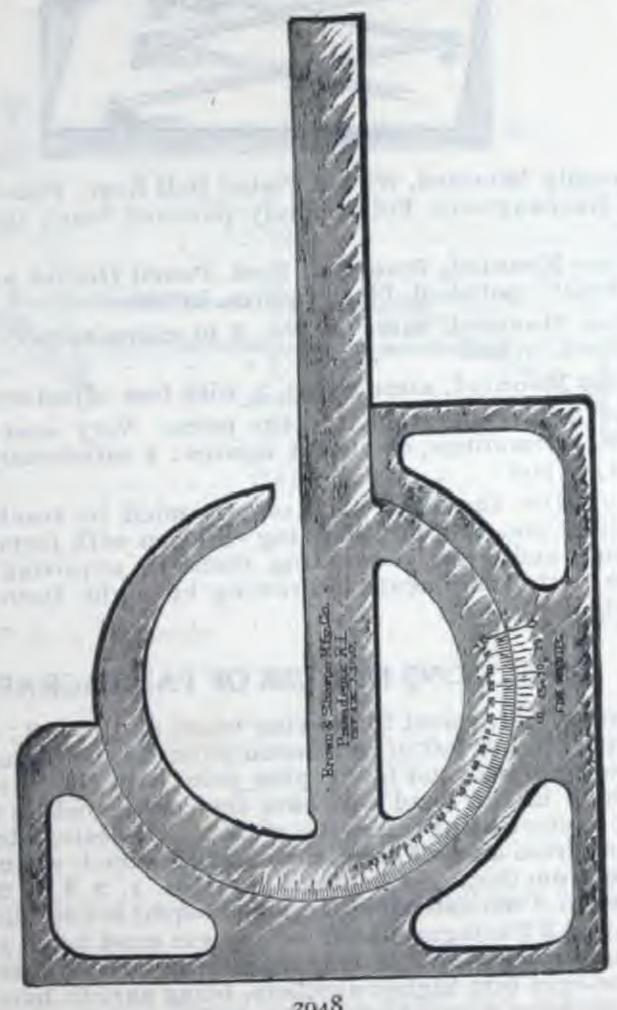
German Silver Swiss Protractors - continued





No. 594. Protractor, 5½ inches diameter, whole circle, ½
degrees, and Vernier reading to three minutes . each, \$14.00
595. Protractor, 8 inches diameter, whole circle, ¼
degrees, and Vernier reading to one minute
596. Protractor, 10 inches diameter, whole circle, ¼
degrees, and Vernier reading to one minute
. ... 20.00

DRAUGHTSMEN'S STEEL PROTRACTOR.

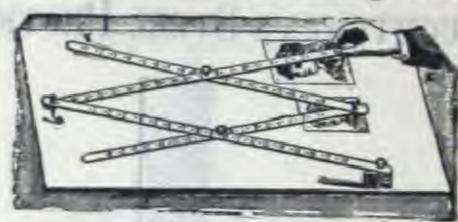


2948

2948.	Steel Protractor, graduated to degrees, with vernier	
1	reading to 5 minutes	\$6.50
2949.	Steel Protractor, No. 2948 in morocco case	7-75

FROST & ADAMS CO.'S PANTAGRAPHS

For Enlarging and Reducing Drawings of All Kinds



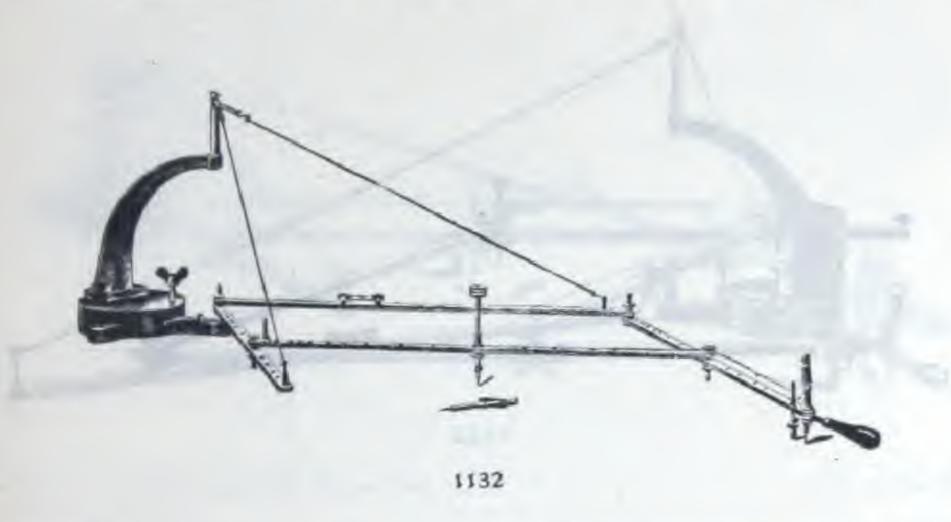
No. 1. Heavily Mounted, Nickel Plated Ball Rest, Pencil Holder and Exchangeable Point; finely polished black figures. In	
2. Brass Mounted, Brass Ball Rest, Pencil Holder and Mova- ble Point; polished, black figures, in box each. 2	.50
polished, in box	.00
	50
4. Brass Monnted, same as No. 3, with less adjustments " 1.	00
stantial trimmings, clean cut figures; a satisfactory instru-	
	50
	25

DIRECTIONS FOR USE OF PANTAGRAPH

Fasten foot of instrument to drawing board on the left; at right fasten drawing paper, and at left of this fasten picture to be copied. Rest point on picture to be copied, and by keeping point over the lines and shadings the pencil held in the hand will have the corresponding movement and copy as fast as steel point traces the picture. If desired to make a very large drawing from a small copy, first make a sketch upon a small sheet and enlarge from that. In Pantagraphs Nos. 1, 2, 3, 4, the figures that are opposite No. 1 indicate an enlargement equal to two diameters. Thus in Nos. 1, 2 and 3 Pantagraphs the screw-eyes must be all placed at figure 26 to get an enlargement of two diameters. To increase enlargement change screw-eyes into higher numbers, being sure to have screw eyes in holes opposite same number on all the sticks. In No. 4 Pantagraph the screw-eye should be in hole No. 15 to enlarge two diameters, and to increase enlargement, moved to the large numbers. In Nos. 5 and 6 the holes are indicated by numbers, and to increase the size of enlargement move the screw-eyes into holes marked with higher numbers. Nos. 1, 2, 3 and 4 can be used for reducing as well as enlarging by reversing position of the pencil and pointer

SUSPENDED PANTOGRAPH

For Reducing and Enlarging in the following ratios: 5:4, 4:3, 3:2, 5:3, 2:1, 5:2, 3:1, 4:1, 5:1, 6:1, 8:1, 10:1, 12:1, 20:1, or vice versa

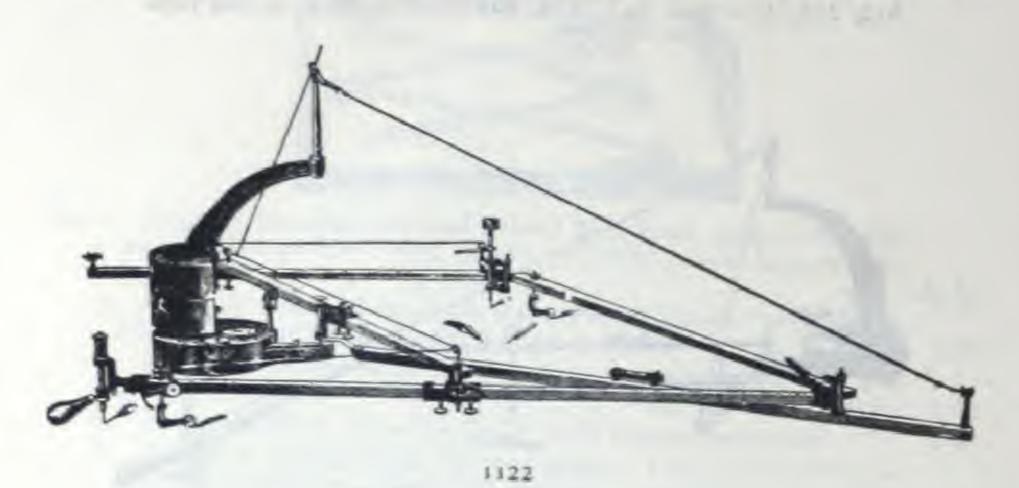


1132.	Length of	Bars,	28	inches					each,	\$35,00
1133.	4.6	100	33	-61			10	1	46	36.00
1134.	18	11	38	10			1.	-31	41	37.50

Pantograph of strong, well-seasoffed Pearwood Bars, connected by Cone Joints and provided with holes accurately bored for the above ratios. Tracing and Pencil Points are interchangeable. Plain Solid Iron Standard. Instrument with Adjustable Tracing Point, Pencil Point, with 3 Brass Weights, 1 Steel Point, 1 Spirit Level, 1 Box of Paragon Leads and Directions. In Hardwood Case with Lock and Key

PRECISION PANTOGRAPH

For Reducing from 20:1 to 1:1 or Enlarging from 1:1 to 1:20 in all ratios

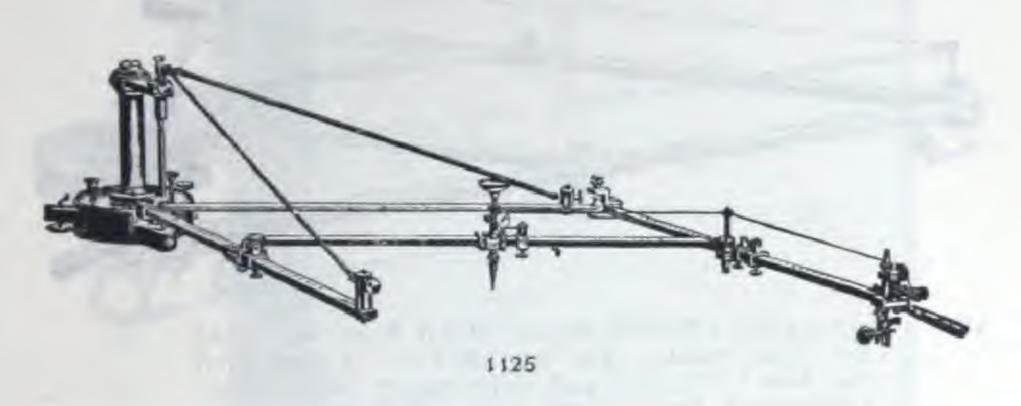


1122.	Lengt	h of	Bars	33	inches		-	-	each, \$160.00
1123.	44	11	11	38	45				170.00

Pantograph of Hollow, Square Metal Bars, connected by pivot-joints; the bars are fully graduated and the sliding sockets are provided with verniers and micrometer adjustments. Extra Supporting Bar and appliances for setting up the instrument with the pole within the parallelogram. Pole and Pencil Point interchangeable. Convenient contrivance for operating the Pencil from the Tracing Point. Solid Iron Standard, with 2 Spirit Levels, 2 Leveling Screws and 2 extra Weights. Instrument with Adjustable Tracing Point, Pencil Point with 3 Brass Weights, 2 Steel Points, 1 Spirit Level, 1 Box of Paragon Leads, Directions and Formula for computing the setting for any ratio. In Polished Hardwood Case with Lock and Key

PRECISION PANTOGRAPH

For Reducing from 20:1 to 5:4 or Enlarging from 1:20 to 4:5 in all ratios



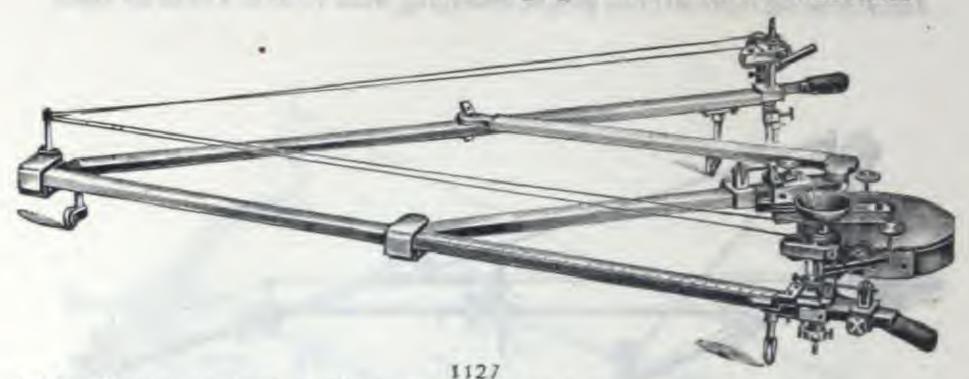
1125. Length of Bars, 24 inches . . . each, \$155.00

This instrument is practically the same as No. 1122, but is without the appliance for erecting the instrument with the pole within the parallelogram and can be used only with the ratios given above

Nos. 1126 to 1128 are of the same quality and workmanship as Nos. 1125 to 112534. They move on castors and are not suspended from a standard. This causes a little more friction, but makes the instrument better adapted for use in a limited space. Is replaced in case more readily than the Suspended Pantographs, as it does not require setting up

PANTOGRAPH

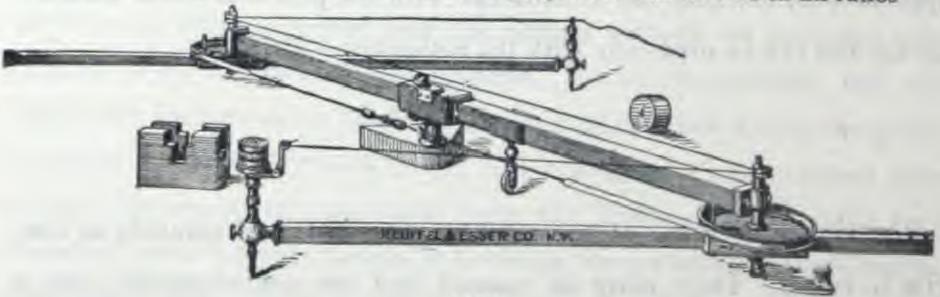
For Reducing from 6:1 to 1:1 or Enlarging from 1:1 to 1:6 in all ratios



by Pivot Joints. The left hand bar is graduated and has a Vernier and Micrometer adjustment. Convenient for operating the Pencil from the Tracing Point. Solid Iron Fulcrum with 2 Adjustable Needle Points to fix its position on the drawing board. With Pencil Point, 2 Steel Points, 1 Box of Paragon Leads, in Hardwood

EIDOGRAPH

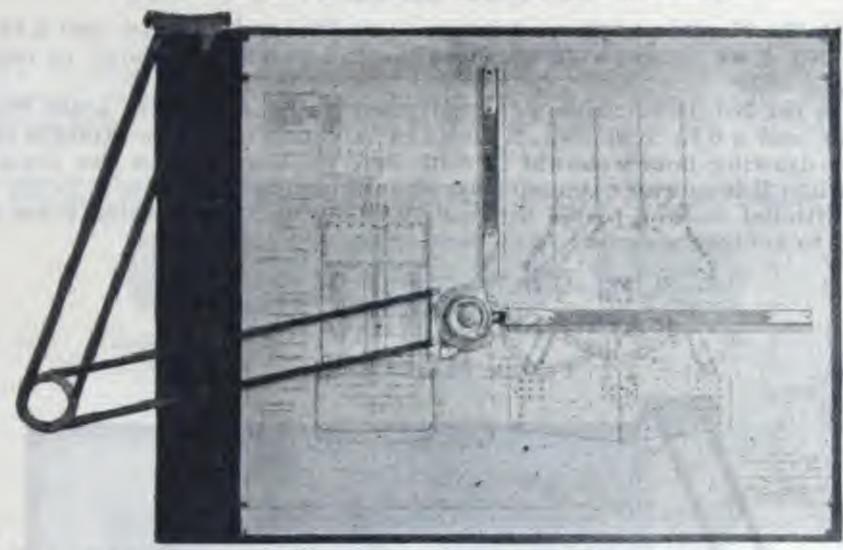
For Reducing from 8:1 to 1:1 or Enlarging from 1:1 to 1:8 in all ratios



1120

Balance Weights and Moveable Support, Arms 30 inches, complete in Hardwood Case, with table of settings

UNIVERSAL DRAFTING MACHINES



No. 18.	Machine	only,	for	draw	ings	up	to 18	X	24	inches	each,	\$25.00
24.	Machine	only,	for	draw	vings	up	to 30) X	36	inches	44	25.00
28.	Machine										66	25.00
Extensi										1	11	.50
Anchor							-				66	.25

SCALES WITH WHITE CELLULOID EDGES

6	inches	long	each,	.75	18	inches	long	each,	\$2.25
12	11	**	11	1.25	24	**	AV.	11	3.00

STANDARD GRADUATIONS OF SCALES

No. 1.	3, 11/2, 34, 3% in. to the foot	No. 5.	20-40
2.	1, 1/2, 1/4, 1/8 " " " "	6.	30-60
	Full and half size	7.	14 and 1/4 size graduated full
4.	10-50		length

Two scales of the same graduation are used, forming a square: Set of 12 in. and 6 in. for the No. 18 machine and Set of 18 in. and 12 in. for the Nos. 24 and 28 machines are usually preferred Other combinations are 12 and 12 inch, 24 and 12 inch, 24 and 18 inch

STRAIGHT EDGES FOR INKING

12	in. long,	ebony	01	maple	edges	each,	.50	12 in.	long,	transparent	celluloid	edges	each,	\$1.00
18	**	16	**	· Ge	16	11		18	11	11	11	66	11	1.25
24	16	- 11	62	11	11	1.0	1.00	24	16	13	44	10	11	1.50
36	- 01	116	11	11	81	11	1.50	And the second	KE	11	41	11	44	2.25

All goods on this page are Net

Universal Drafting Machines - continued

With the No. 24 and 28 machines we usually send an 18 in. and a 12 in. scale No. 1, an 18 in., a 12 in. scale No. 2, and a 24 in. ebony or maple straight edge

With the No. 18 machine we usually send a 12 and a 6 in. scale No. 1, a 12 in. and a 6 in. scale No. 2, and a 24 in. ebony or maple straight edge

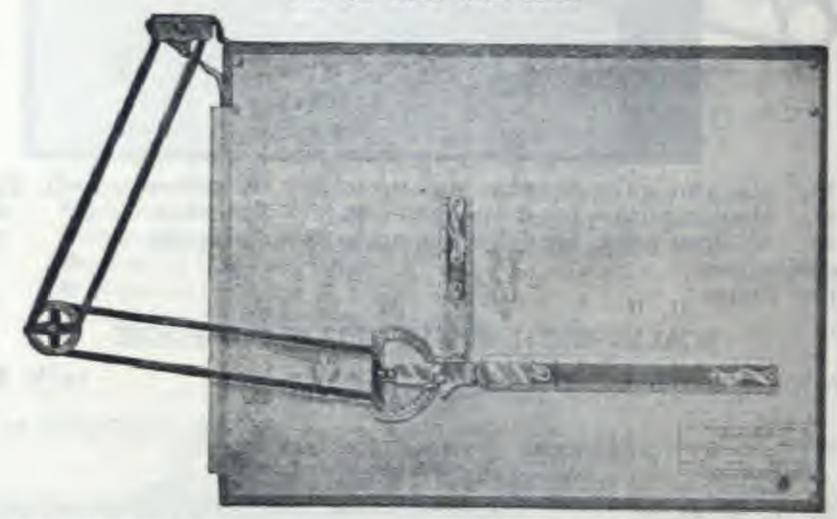
The drawing board should be 6 in. or 7 in. longer than the drawing

and when it is not an extension bar should be used

Additional anchor plates for readily changing the machine from one board to another may be had

RAPID SKETCHING DEVICE

For the Man with Ideas



The Rapid Sketching Device, for drawings up to 18 x 24 inches, without board or scales each, \$14.00

The Scales, Straight Edges, etc., listed on page 276a are used with this machine

The convenience and completeness of the Rapid Sketching Device induce you to put your ideas on paper at once, instead of continually delaying the matter, burdening your mind, or even losing the ideas entirely

With your idea put on paper, to scale, instead of being loosely held in the mind, or merely represented by a free hand sketch, it may be improved and put into practical shape without delay, or if found to be impracticable, discarded for something better

All goods on this page are Net

NEEDLE POINTS

For Mathematical Instruments

We furnish Needle Points to fit any Instrument. In ordering it is necessary to mention the Instrument for which the Needle Point is desired, thus: "Needle Point for 1532," see page 401. . each, .15

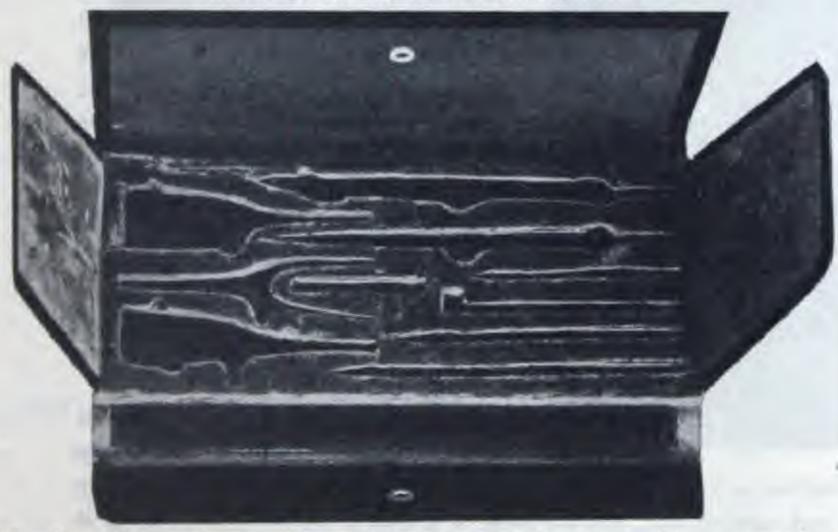
BOX OF LEADS FOR DRAWING INSTRUMENTS



No. 559. Fine German Silver Box, screw cap, containing 6 leads per box, .25

EMPTY FOLDING AND POCKET CASES

Fitted for Mathematical Instruments

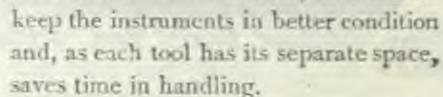


Lined with	Silk Velvet.	Size of	Case	closed	2	× 6	in.	each,	\$1.50
**	11	1.6	4.6	4.6	3	× 71/2	16	11	2.00
4.6	**	44	**	**	31/2	× 9	11	11	2.50
11.	0	. 84	9.4	11	5	× 9	11	16	3.00
26	10	1.00	16	1.6	5	×121/2	11	11	4.50
**		16	16.6	11	6	×10	56	44	4.00
er.	31	14	4.4	11	7	×11	11	-44	4.60
186	**	- 11	.66	16	7	×13	16	44	5.00

These Folding Cases are covered with Morocco, with Sliding Bar Lock Pocket Case, Folding Flaps, Chamois Lined, as cut, add 20% to above

MATHEMATICAL INSTRUMENTS IN CASES

In selecting a set of instruments the purchaser is not limited to the combinations as listed on the following pages, as we make to order, at short notice, special cases to suit any selection of instruments which the draughtsman may consider adapted to his line of work. It is advisable to have an instrument case, both for convenience and as a protection for the instruments; it tends to





The Alteneder pocket case is the best and most compact form of instrument case ever offered. When closed it has the appearance of a wallet and may be carried in the pocket without any greater inconvenience. With the exception of the block into which the instruments are fitted, it is all leather; the lining is colored chamois and the outside genuine morocco leather. This case is well adapted to withstand such wear as instrument cases are subjected to, and where a draughtsman has occasion to carry his instruments no more desirable case is to be had.

The morocco-covered cases are well made in every detail, and are a very

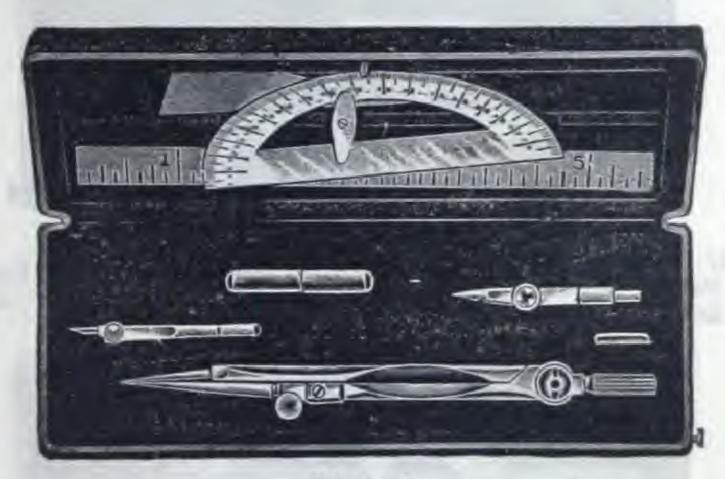
satisfactory form of instrument case. The wood frames are firmly put together and the covering is genuine morocco; the lining is green velvet, although the colored chamois, as used in the Alteneder pocket-cases, may be substituted with good results both as regards appearance and wear. The hinges and catches are flush.

The mahogany cases are made of selected well-seasoned wood, finely polished, and are provided with good locks. They have loose cushion in lid and removable tray. The lining is green velvet, but chamois may be used instead as noted for the morocco-covered cases. A metal name plate is fitted in the lid if specified.

FROST & ADAMS CO.'S

NICKEL PLATED INSTRUMENTS

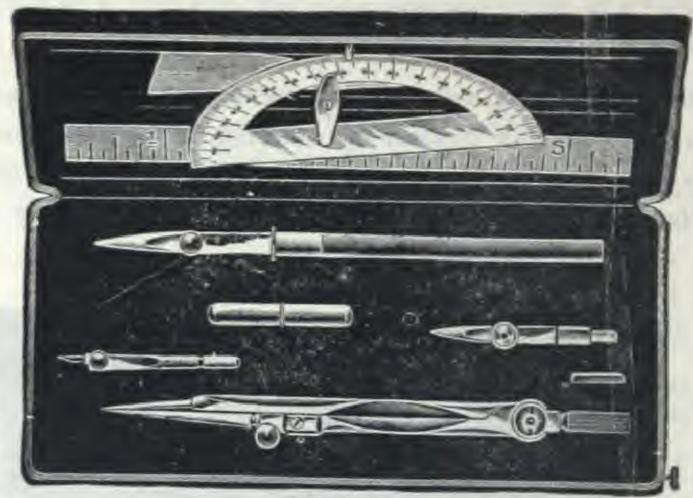
In Velvet Lined Leatherette Cases, with Sliding Bar Lock, including Protractor. A New Feature is the Handle on these Instruments, which up to now has only been attached to German Silver Instruments. Nickel Plated Instruments have the Improved Round Points



NO. 4440

- No. 4438. Case contains 7 pieces: 31/2 in. Divider with Pen, and Pencil Point, Box of Leads, Key for Divider, Metal Protractor, Wood Ruler each, .65
 - 4439. Case contains 8 pieces: 312 in. Divider with Pen, and
 Pencil Point, Box of Leads, Key for Divider, Ruling
 Pen, Metal Protractor, Wood Ruler . . . each, .70
 - 4440. Case contains 7 pieces: 4½ in. Divider with Pen, and
 Pencil Point, Box of Leads, Key for Divider, Metal Protractor, Wood Ruler each, 80

Nickel Plated Instruments-continued



NO. 4441

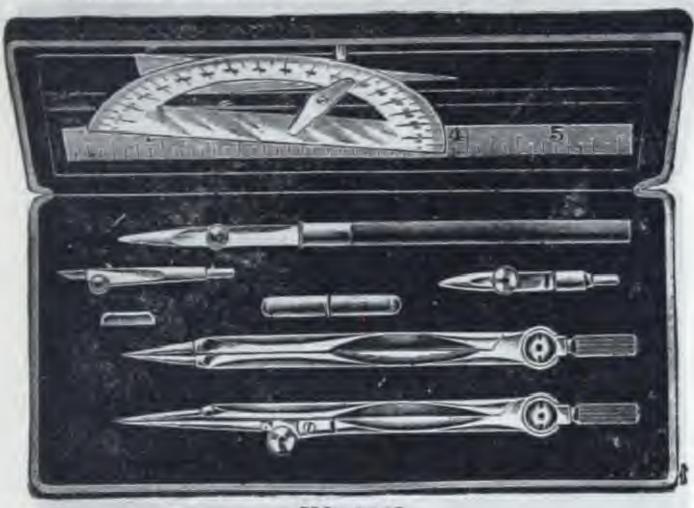
No. 4441. Case contains 7 pieces: 4½ in. Divider with Pen, and Pencil Point, Ruling Pen, Box of Leads, Key for Divider, Metal Protractor each, .90



NO. 4442

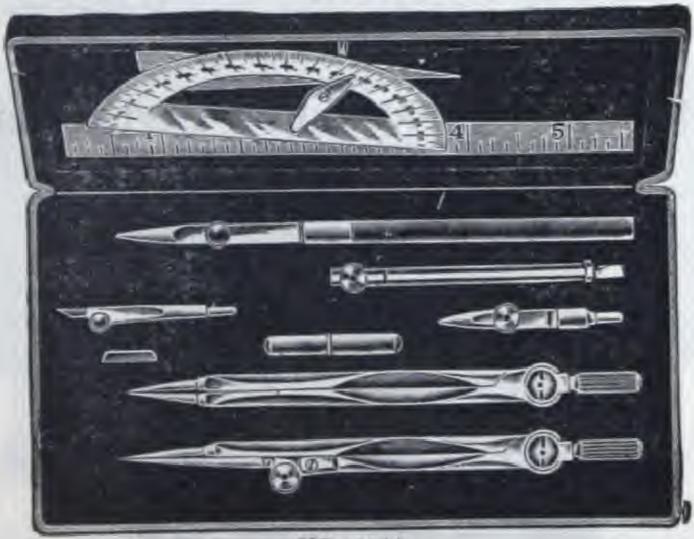
Pencil Point and Lengthening Bar; Ruling Pen, Box of Leads, Key for Divider, Metal Protractor . . each, \$1.00

Nickel Plated Instruments-continued



NO. 4443

No. 4443. Case contains 9 pieces: 4½ in. Divider with Pen, and Pencil Point; Plain Divider, Ruling Pen, Box of Leads, Key for Dividers, Metal Protractor, Ruler each, \$1.15



NO. 4444

Nickle Plated Instruments-continued



NO. 4445

No. 4445. Case contains 10 pieces: 41/2 in. Divider with Pen,
Pencil Point and Lengthening Bar; Plain Divider, Ruling Pen, Spring Bow Pen, Box of Leads, Key for
Dividers, Metal Protractor each, \$1.75

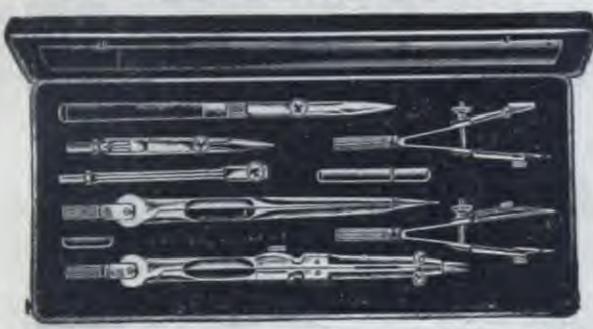
GERMAN SILVER SPRING BOW INSTRUMENTS



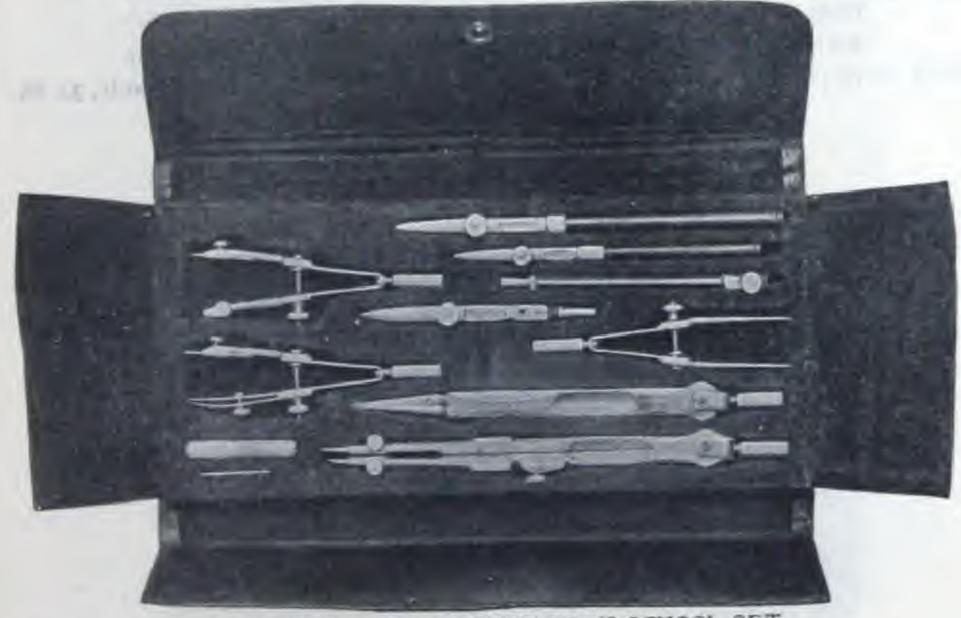
NO. 2254

No. 2254. Morocco Case contains 3 pieces: 31/2 in. Spring Bow Pen, 31/2 in. Spring Bow Pencil, 31/2 in. Spring Bow Divider each, \$3.50

FROST & ADAMS CO.'S SCHOOL SETS GERMAN SILVER INSTRUMENTS



No. 65. Case contains 9 pieces: 5½ in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar; 5 in. Plain Dividers, 3½ in. Spring Bow Pen, 3½ in. Spring Bow Pen, 3½ in. Spring Bow Pencil, 5 in. Spring Back Ruling Pen, Box of Leads and Key each, \$5.00



No. 1. F. & A. CO. POCKET BOOK SCHOOL SET

No. 1. Pocket Book Case contains 11 pieces: 5½ in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar; 5 in. Plain Dividers, 3 in. Bow Pen, 3 in. Bow Pencil, 3 in. Bow Dividers, 4 in. Ruling Pen, 5 in. Ruling Pen, Box of Leads and Key each, \$5.00

Frost & Adams Co.'s German Silver School Sets — continued
For Elementary School Grades



NO. 408

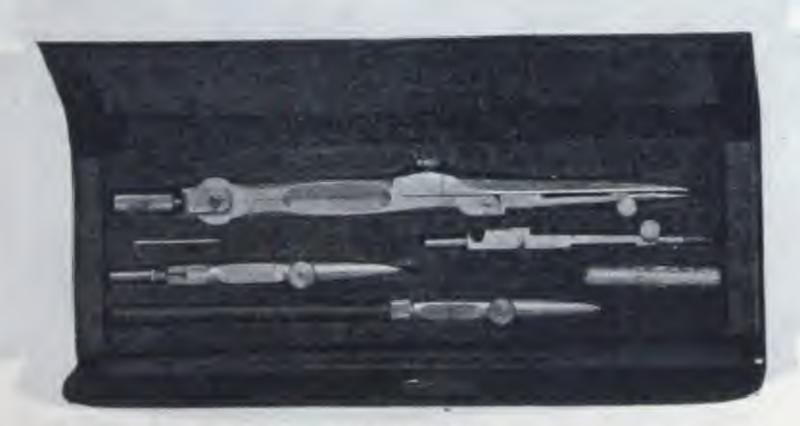


NO. 409

Frost & Adams Co.'s German Silver School Sets - continued



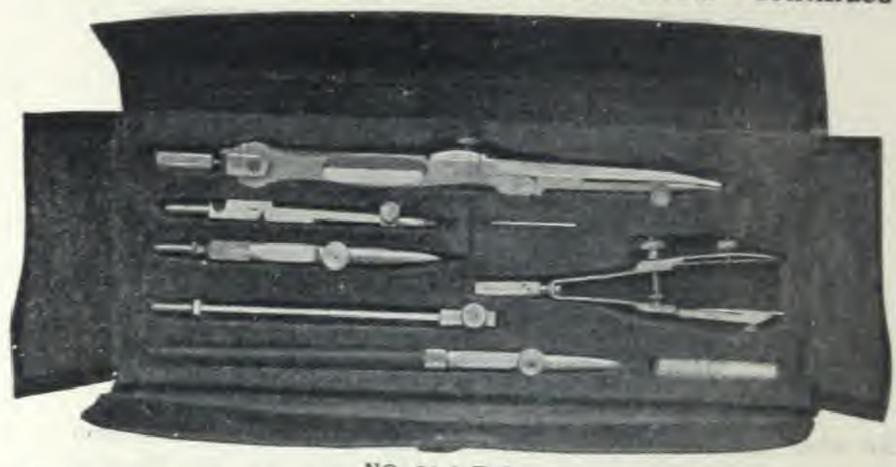
NO. 410



NO. 50 P.B.

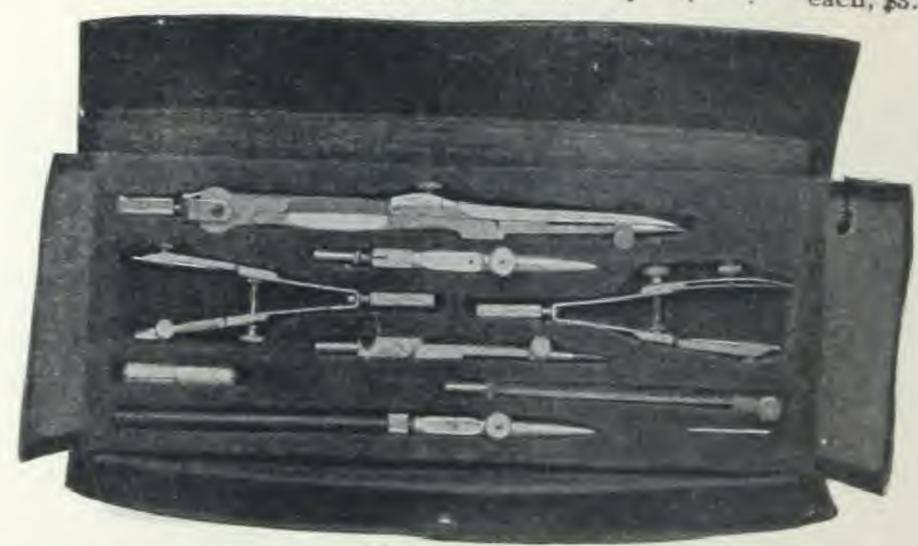
No. 50 P. B. Case contains 6 pieces: 6 in. Divider with fixed Needle Point, Pen and Pencil Point, 5 in. Spring Back Ruling Pen, Box of Leads, Key for Divider each, \$2.75

Frost & Adams Co.'s German Silver School Sets-continued



NO. 51-1 P. B.

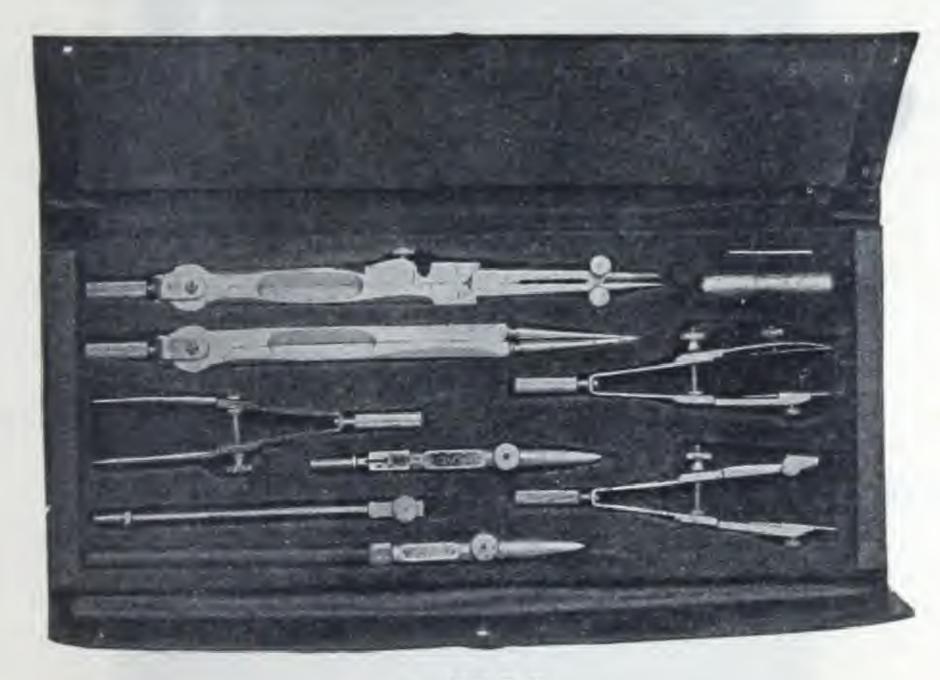
No. 51-1 P. B. Case contains 8 pieces: 6 in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar, 314 in. Spring Bow Pen, 5 in. Spring Back Ruling Pen, Box of Leads, Key for Divider each, \$3.50



NO. 52-2 P.B.

No. 52-2 P. B. Case contains 9 pieces: 6 in. Divider with fixed Needle Point, Pen and Pencil Point, 34 in. Spring Bow Pen, 34 in. Bow Pencil, 5 in. Spring Back Ruling Pen, Box of Leads, Key for Divider each, \$4.50

Frost & Adams Co.'s German Silver School Sets - continued



NO. 53-3 P. B.

Case contains 11 pieces: 6 in. Divider, with fixed Needle Point,

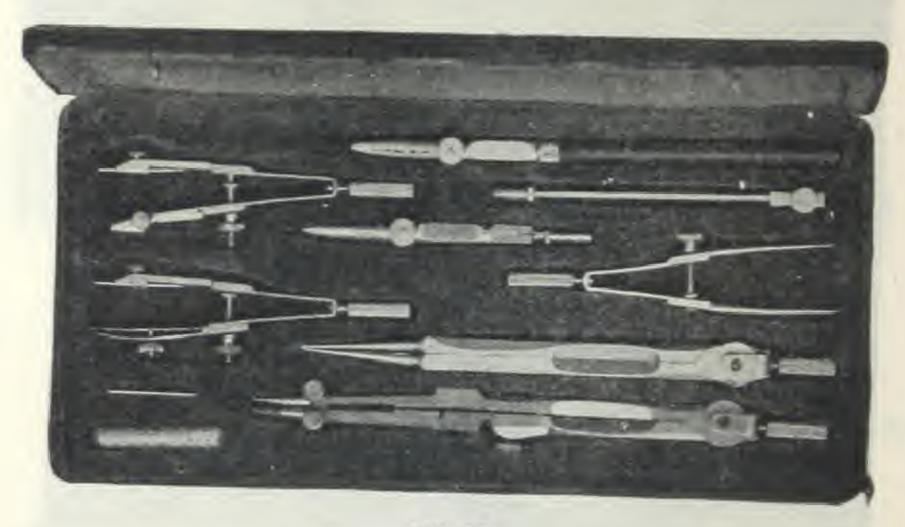
Pen, Pencil Point and Lengthening Bar, 3¼ in. Spring

Bow Pen, 3¼ in. Spring Bow Pencil, 3¼ in. Spring Bow

Divider, 5 in. Spring Back Ruling Pen, Box of Leads,

Key for Divider each, \$5.25

Frost & Adams Co.'s German Silver School Sets - continued



NO. 73

No. 73. Case contains 10 pieces: 6 in. Divider with fixed Needle

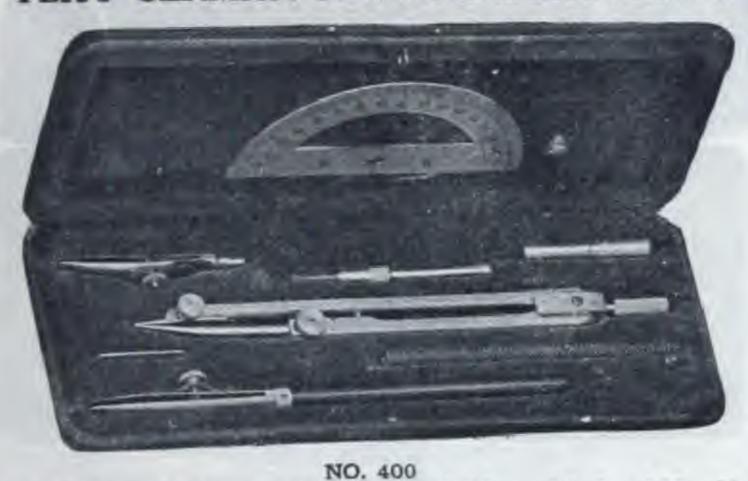
Point, Pen and Pencil Point, 5½ in. Plain Divider, 3½ in.

Spring Bow Pen, 3½ in. Spring Bow Pencil, 3½ in. Spring

Bow Divider, 5 in. Spring Back Ruling Pen, Box of Leads,

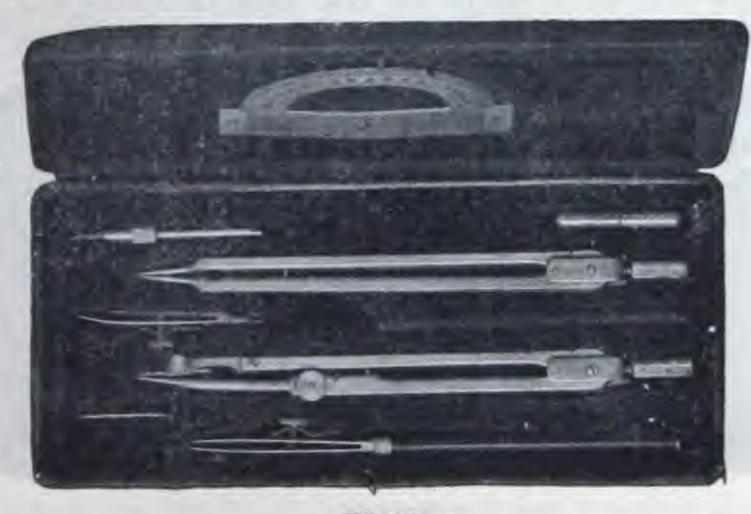
Key for Divider , each, \$4.75

FROST & ADAM'S CO.'S FLAT GERMAN SILVER INSTRUMENTS



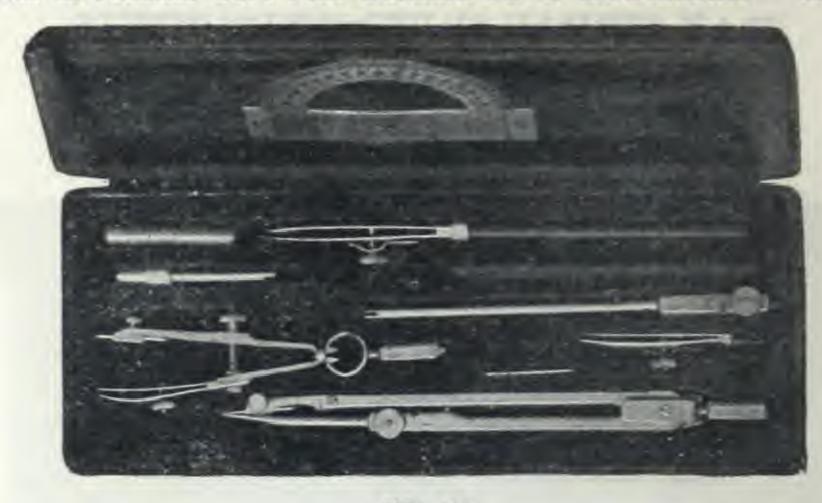
No. 400. Case contains 8 pieces: 51/2 in. Divider with fixed Needle Point, Pen and Pencil Point, 5 in. Spring Back Ruling Pen with release, Extra Metal Handle for Pen, Metal Protractor, Box of Leads, Key for Dividers eac

each, \$3.00



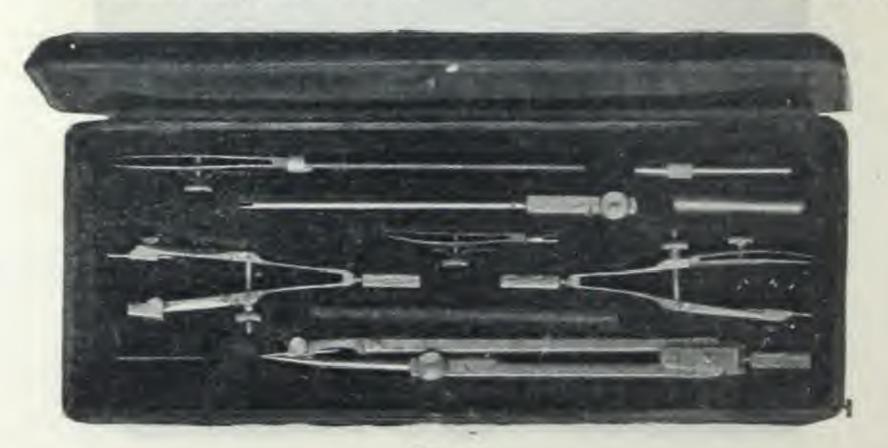
NO. 401

No. 401. Case contains 10 pieces: 51/2 in. Divider with fixed Needle Point, Pen and Pencil Point, 51/2 in. plain Divider, 5 in. Ruling Pen with release, Extra Metal Handle for Ruling Pen, Metal Protractor, Box of Leads, Key for Dividers each, \$3.75



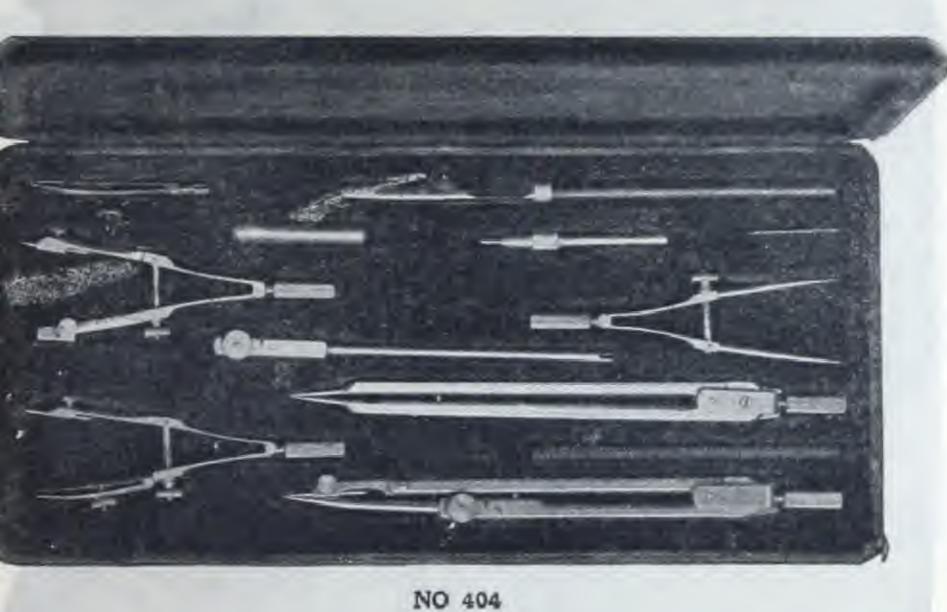
NO. 402

No. 402. Case contains 10 pieces: 5¾ in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar, Spring Back Ruling Pen with release, 3½ in. Spring Bow Pen, Extra Haudle for Pen, Metal Protractor, Box of Leads, Key for Dividers each, \$4.00

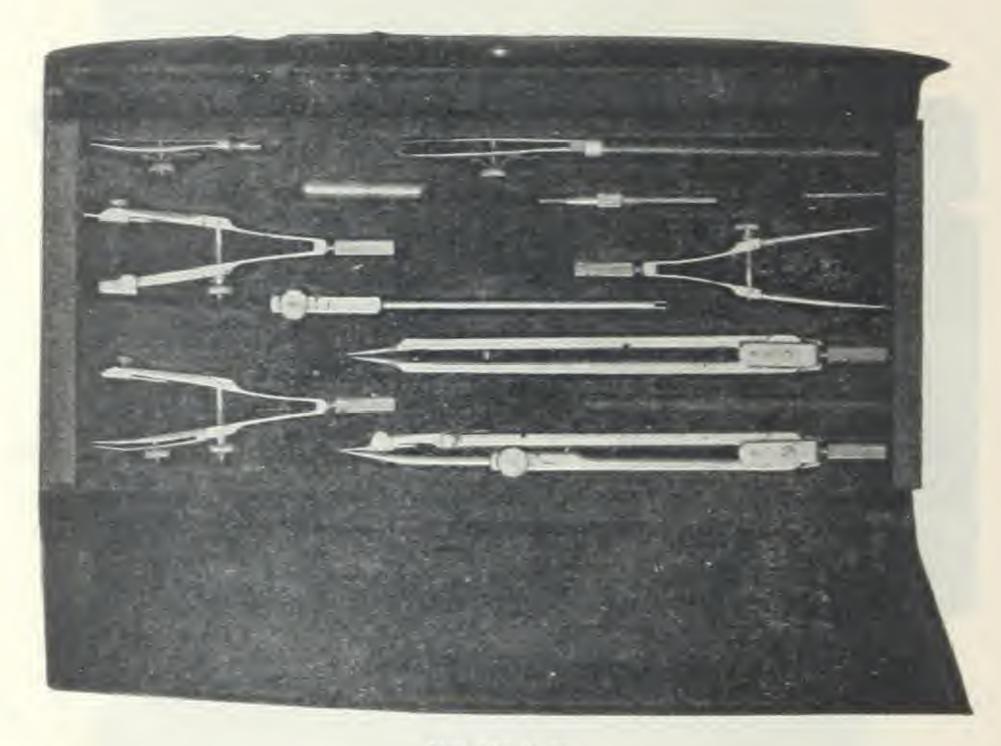


NO. 403

No. 403. Case contains 10 pieces: 5½ in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar, 3½ in. Spring Bow Pen, 3¼ in. Spring Bow Pencil, 5 in. Spring Back Ruling Pen with release, Extra Handle for Pen, Box of Leads, Key for Dividers . . . each, \$4.50



No. 404. Case contains 12 pieces: 5% in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar, 534 in. Plain Divider, 314 in. Spring Bow Divider, 314 in. Spring Bow Pen, 34 in. Spring Bow Pencil, 5 in. Spring Back Ruling Pen with release, Extra Handle for Ruling Pen, Box of Leads, Key for Dividers . . . each, \$6.00



NO. 405 P. B.

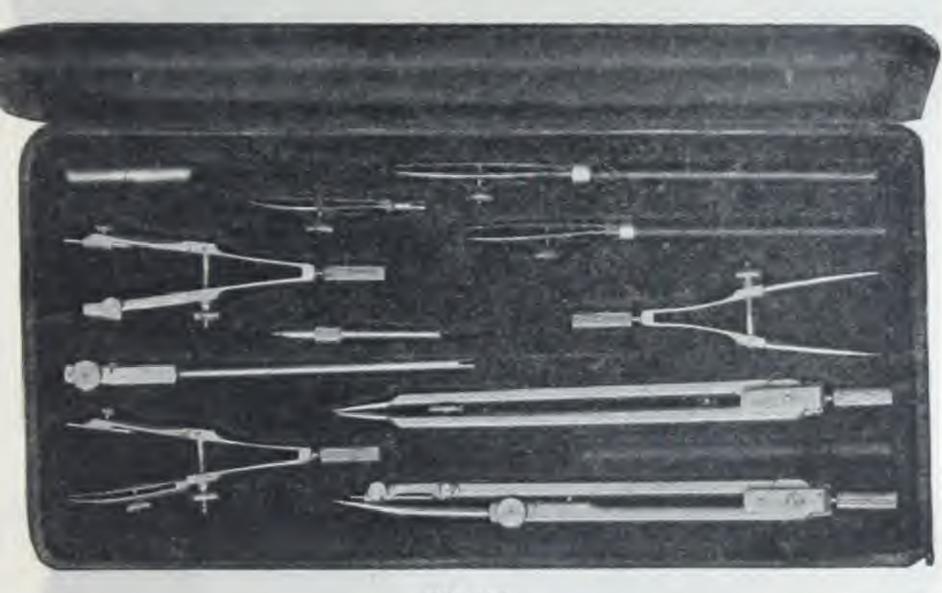
No. 405 P.B. Case contains 12 pieces: 5½ in. Divider with fixed

Needle Point, Pen and Pencil Point, 3¼ in. Bow Pen,

3¼ in. Bow Pencil, 3¼ in. Divider, 5 in. Spring Back Ruling

Pen with release, Extra Handle for Ruling Pen, Box of

Leads, Key for Dividers each, \$8.00



NO. 406

No. 406. Case contains 13 pieces: 5¾ in. Divider with fixed

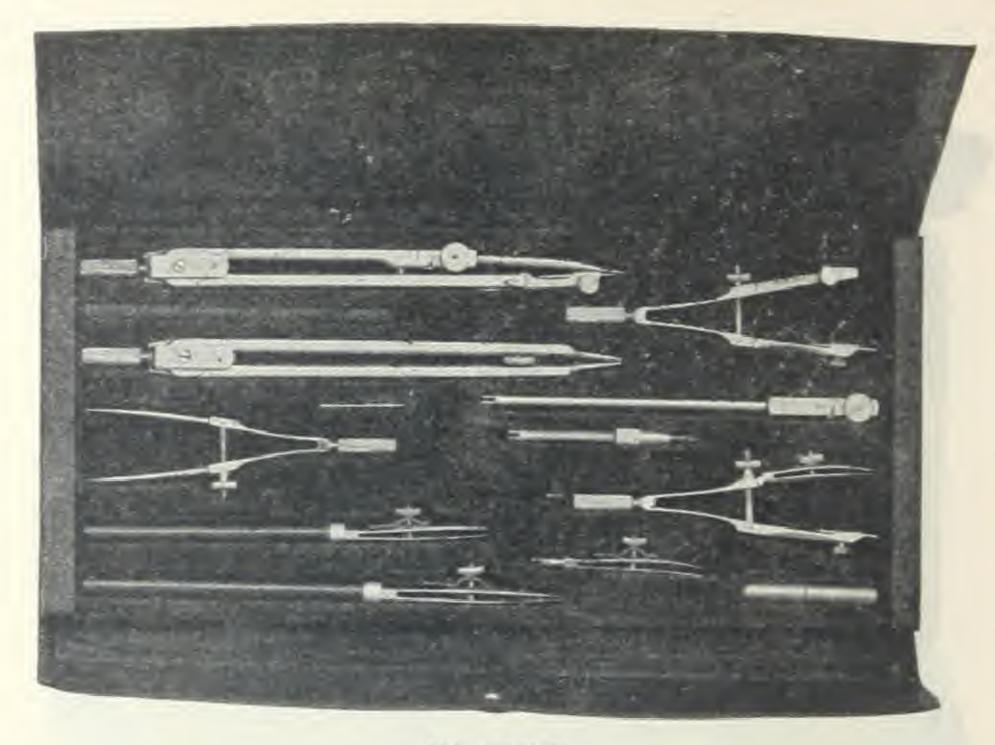
Needle Point, Pen and Pencil Point, 5¾ in. Divider with

Hair Line Spacing Attachment, 3¼ in. Spring Bow Pen,

3¼ in. Spring Bow Pencil, 3¼ in. Spring Bow Divider,

5 in. Ruling Pen with release, 4¼ in. Ruling Pen with

release, Box of Leads, Key for Dividers , each, \$7.25



NO. 407 P. B.

No. 407 P.B. Case contains 13 pieces: 5½ in. Divider with fixed

Needle Point, Pen and Pencil Point, 5½ in. Divider with

Hair Spring, Line Spacing Attachment, 3 in. Spring Bow

Pen, 3¼ in. Spring Bow Pencil 3 in. Spring Bow Divider,

5 in. Spring Back Ruling Pen with release, 4½ in. Spring

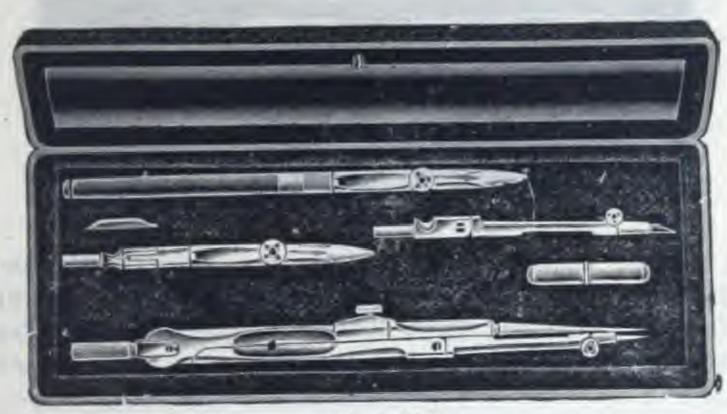
Back Ruling Pen with release, Extra Handle for Ruling

Per, Box of Leads, Key for Dividers . . . each, \$9.00

FROST & ADAMS CO.'S

GERMAN SILVER INSTRUMENTS

Solid German Silver with Steel Points, Pivot Joints, with German Silver Handles, in Morocco Cases lined with Silk Velvet. Improved pattern, with interchangeable parts



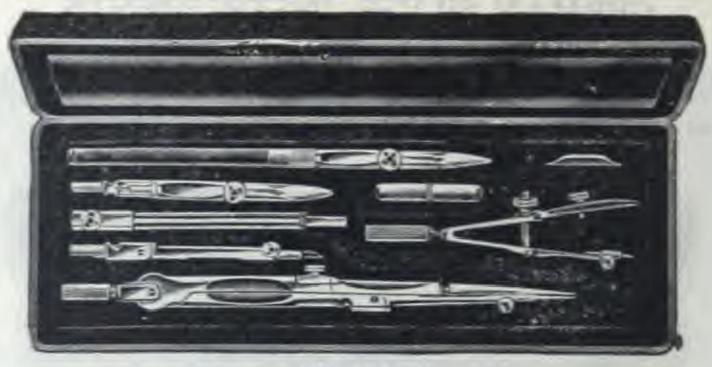
NO. 5000

No. 5000. Case contains 6 pieces: 5½ in. Divider with fixed
Needle Point, Pen, and Pencil Point; 5 in. Spring
Back Ruling Pen, Box of Leads, Key for Divider each, \$2.15



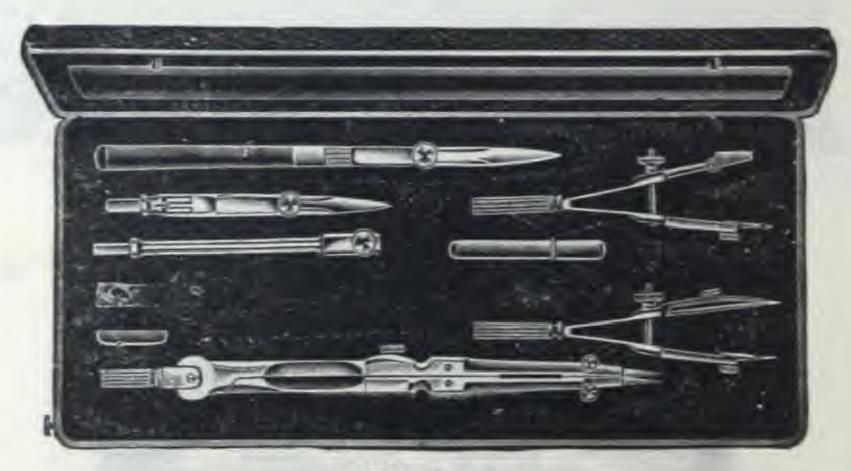
NO. 5001

No. 5001. Case contains 7 pieces: 5½ in. Divider with fixed
Needle Point, Pen, and Pencil Point; 5 in. Plain
Divider, 5 in. Spring Early Puling Pen, Box of Leads,
Key for Dividers each, \$2.50



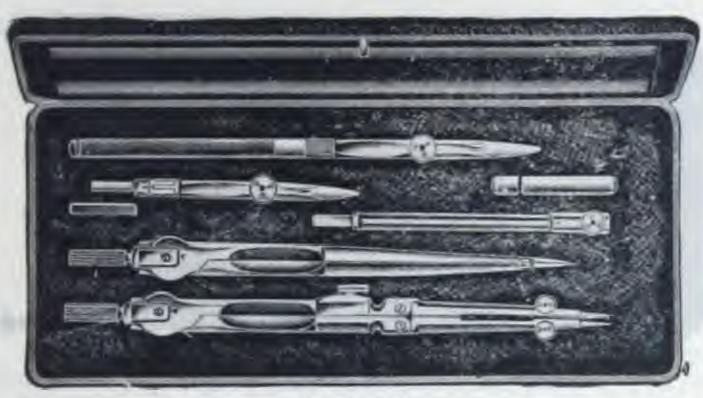
NO. 2054-1

No. 2054-1. Case contains 8 pieces: 5½ in. Divider with fixed
Needle Point, Pen, Pencil Point and Lengthening
Bar; 5 in. Spring Back Ruling Pen, Spring Bow Pen
Box of Leads, Key for Divider each, \$3.00



NO. 2054-2

No. 2054-2. Case contains 9 pieces: 5½ in. Divider with fixed
Needle Point, Pen, Pencil Point and Lengthening
Bar; 5 in. Plain Divider, 5 in. Spring Back Ruling Pen,
Spring Bow Pen, Spring Bow Pencil, Box of Leads,
Key for Dividers each, \$3.50



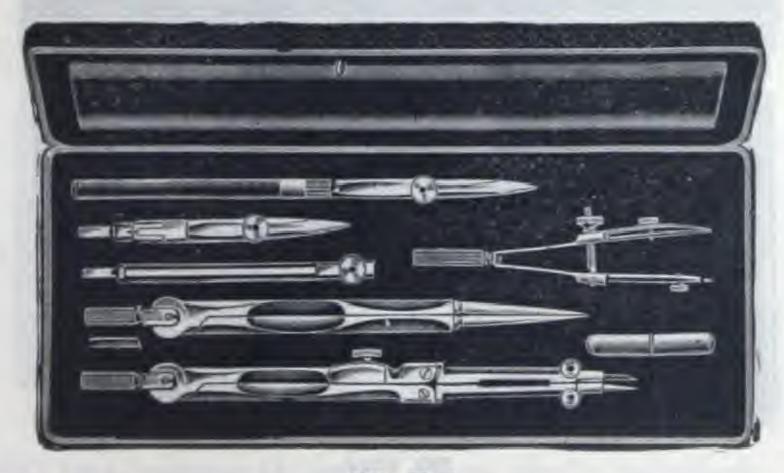
NO. 5041

No. 5041. Case contains 7 pieces: 5½ in. Divider with fixed

Needle Point, Pen, Pencil Point and Lengthening

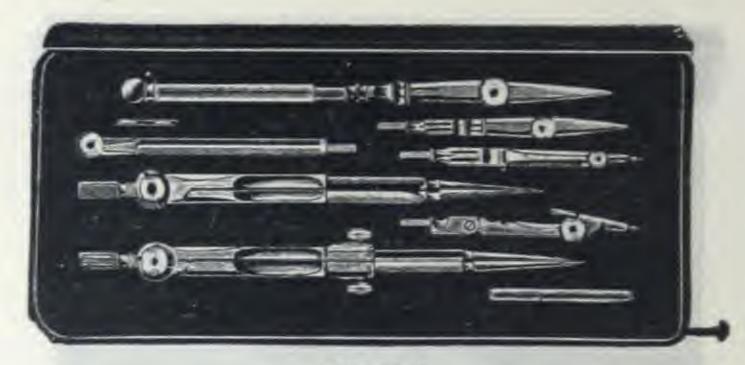
Bar; 5 in. Plain Divider, 5 in. Spring Back Ruling Pen,

Box of Leads, Key for Dividers each, \$3.50

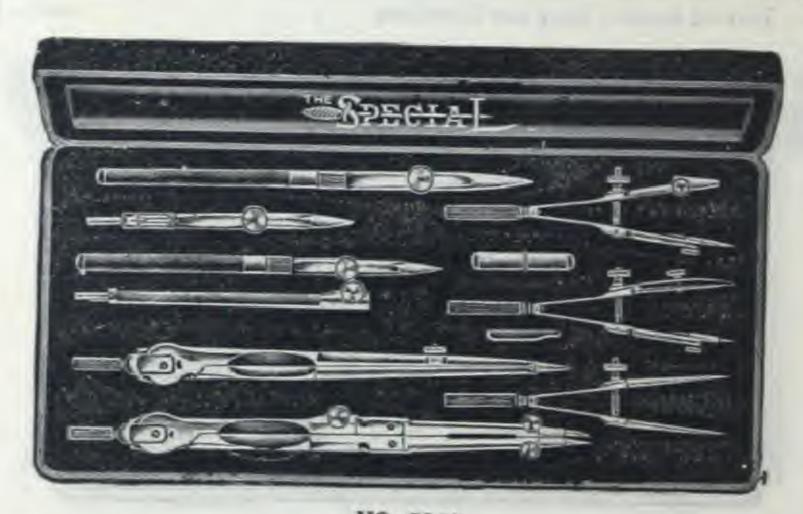


NO. 5042

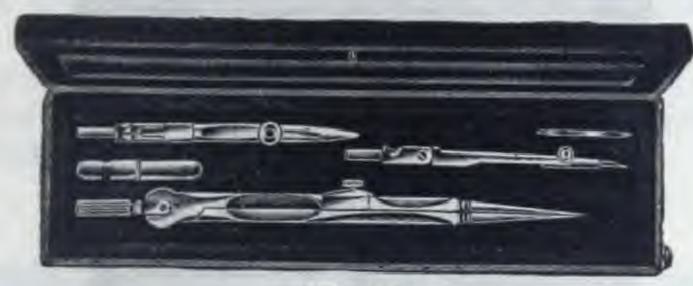
No. 5042. Case contains 8 pieces; 5½ in. Divider with fixed
Needle Point, Pen, Pencil Point and Lengthening
Bar; 5 in. Plain Divider, Spring Bow Pen, 5 in. Spring
Back Ruling Pen, Box of Leads, Key for Dividers each, \$4.00



NO. 5043

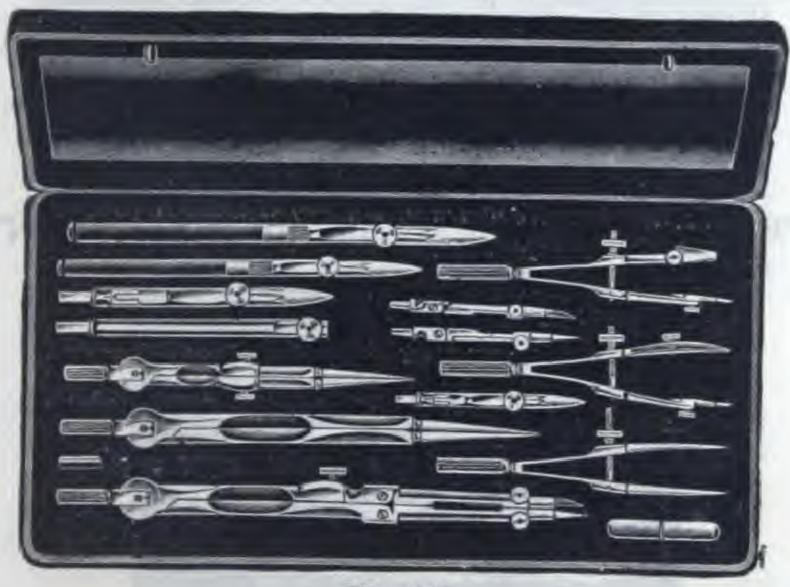


NO. 5044

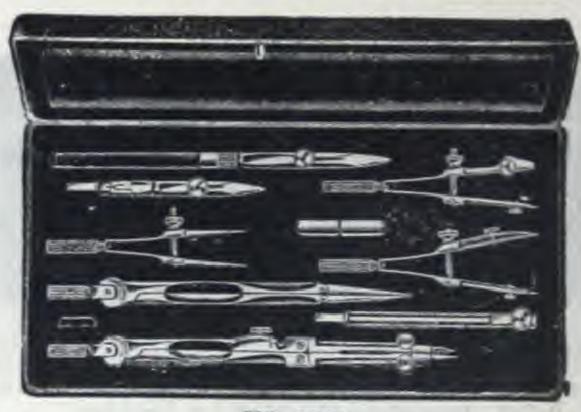


NO. 2070

No. 2070. Case contains 5 pieces: 51/2 in. Divider with Pen, and Pencil Point, Box of Leads, Key for Divider . each, \$2.00



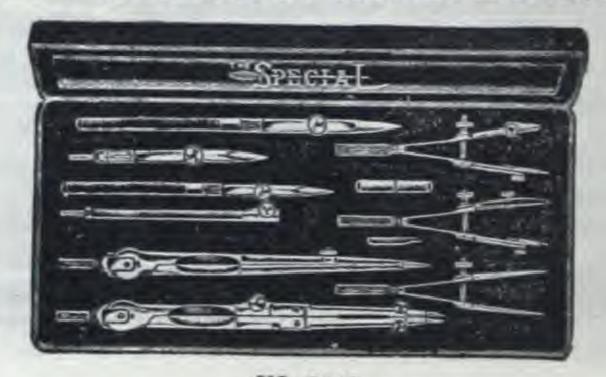
NO. 5045



NO. 3276

No. 3276. Case contains 10 pieces: 5½ in. Divider with fixed Needle Point, Pen, Pencil Point and Longthening Bar; 5 in. Plain Divider, Spring Bow Pen, Spring Bow Pencil, Spring Bow Divider, 5 in. Spring Back Ruling Pen, Box of Leads, Key for Dividers each, \$5.50

FROST & ADAMS CO.'S SPECIAL FINE GERMAN SILVER INSTRUMENTS



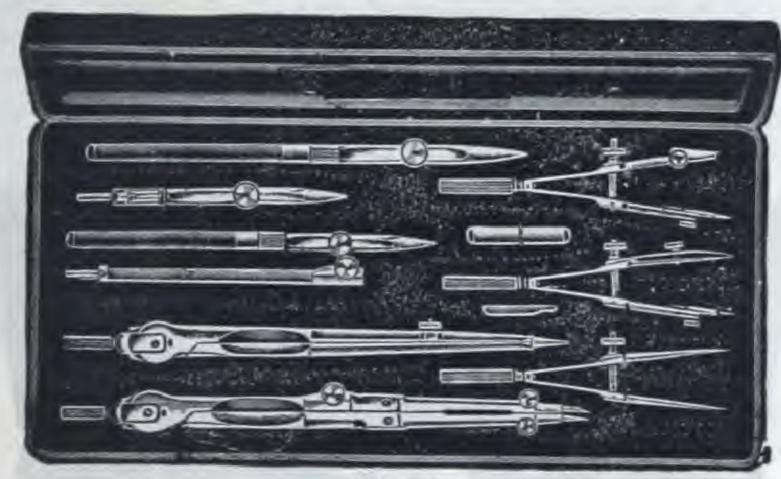
NO. 2113

No. 2113. Case contains 11 pieces: 5½ in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar; 5 in. Divider with Hair Line Spacing Attachment, Spring Bow Pen, Spring Bow Pencil, Spring Bow Divider, 4½ in. Spring Back Ruling Pen, 5 in. Spring Back Ruling Pen, Box of Leads, Key for Dividers each, \$9.00

FROST & ADAMS CO.'S

FIRST QUALITY GERMAN SILVER INSTRUMENTS

Made of the Best Grade of German Silver with Highly Tempered Steel Points, Excellent Finish, with Pivot Joints and Set Screws, German Silver Handle with Straightening Device



NO. 700

No. 700 Case contains 11 pieces: 5½ in. Divider with fixed
Needle Point, Pen, Pencil Point and Lengthening Bar;
5 in. Divider with Hair Line Spacing Attachment;
Spring Bow Pen, Spring Bow Pencil, Spring Bow
Divider; 4½ in. Spring Back Ruling Pen; 5 in. Spring
Back Ruling Pen, Box of Leads, Key for Dividers each, \$10.06

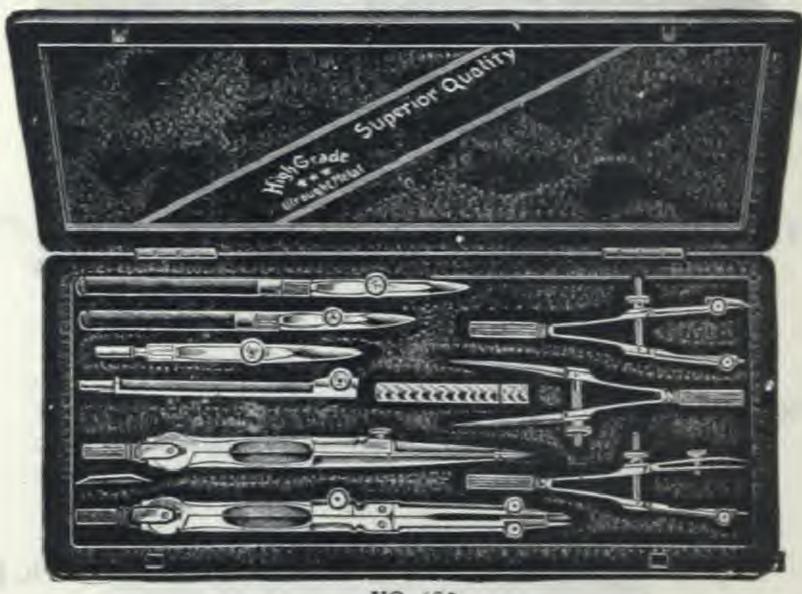
No. 2112. Case contains 8 pieces: 5½ in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar; 5 in. Plain Divider: Spring Bow Pen; 5 in. Spring Back Ruling Pen, Box of Leads, Key for Dividers . . . each, \$6.00

FROST & ADAMS CO.'S GERMAN SILVER INSTRUMENTS

High Grade, Wrought Metal, Superior Quality

The Superior Quality, High Grade Instruments are made of Wrought German Silver with best English Steel Points. In finish as well as material they are of the very highest type which modern machinery and skilled workmanship can produce. The Compasses and Dividers have the excellent Straightening Device with Pivot Joints with Set Screws. Each Instrument is stamped *** (Trade Mark). Cases are made of hard wood covered with best Morocco leather; they are lined with green silk velvet, or if in the "Pocket Book" shape, lined with chamois leather

All Ruling Pens and Pen Parts are carefully ground and set

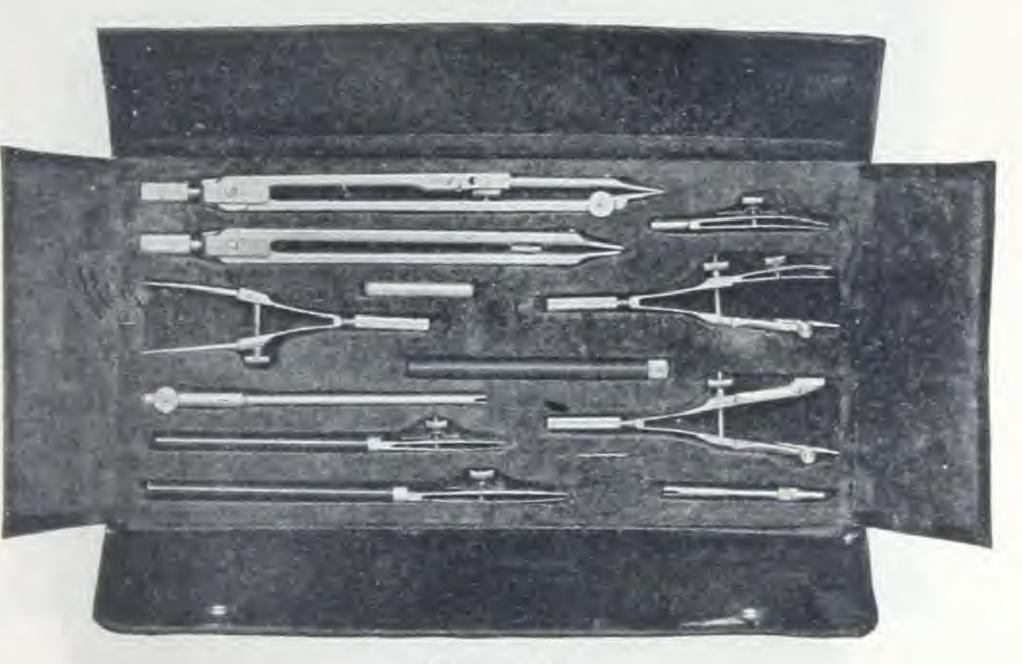


NO. 600

No. 600 Case contains 11 pieces: 5½ in. Divider with fixed
Needle Point, Pen, Pencil Point and Lengthening Bar;
5 in. Divider with Hair Line Spacing Attachment, Spring
Bow Pen, Spring Bow Pencil, Spring Bow Divider,
4½ in. Spring Back Ruling Pen, 5 in. Spring Back
Ruling Pen, Box of Leads, Key for Dividers each, \$15.00

FROST & ADAMS CO.'S FLAT GERMAN SILVER INSTRUMENTS

High Grade



NO. 100 P.B.

No. 100 P. B. Case contains 13 pieces: 5½ in. Divider with fixed

Needle Point, Pen, Pencil Point and Lengthening Bar,

5½ in. Divider with Hair Line Spacing Attachment, 3¾

in. Spring Bow Pen, 3¾ in. Spring Bow Pencil, 3¾ in.

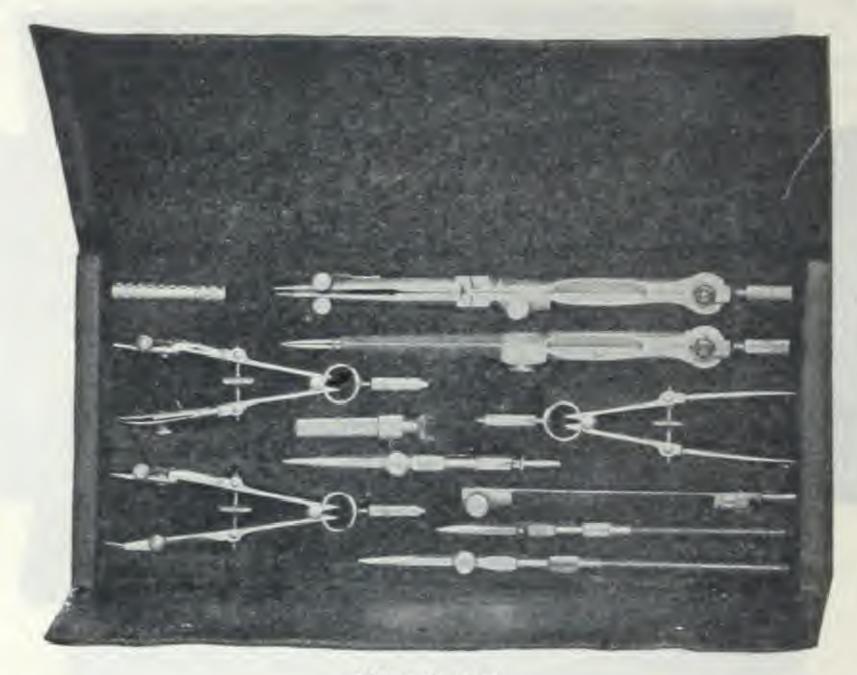
Spring Bow Divider, 4¼ in. Spring Back Ruling Pen

with release attachment, 5 in. Spring Back Ruling Pen

with release attachment, Extra Handle for Ruling Pen,

Box of Leads, Key for Divider each, \$22.50

This case is made of Soft Morocco Leather with flaps, Plush Lined



NO. 200 P. B.

No. 200 P. B. Case contains 13 pieces: 6¼ in. Divider with fixed

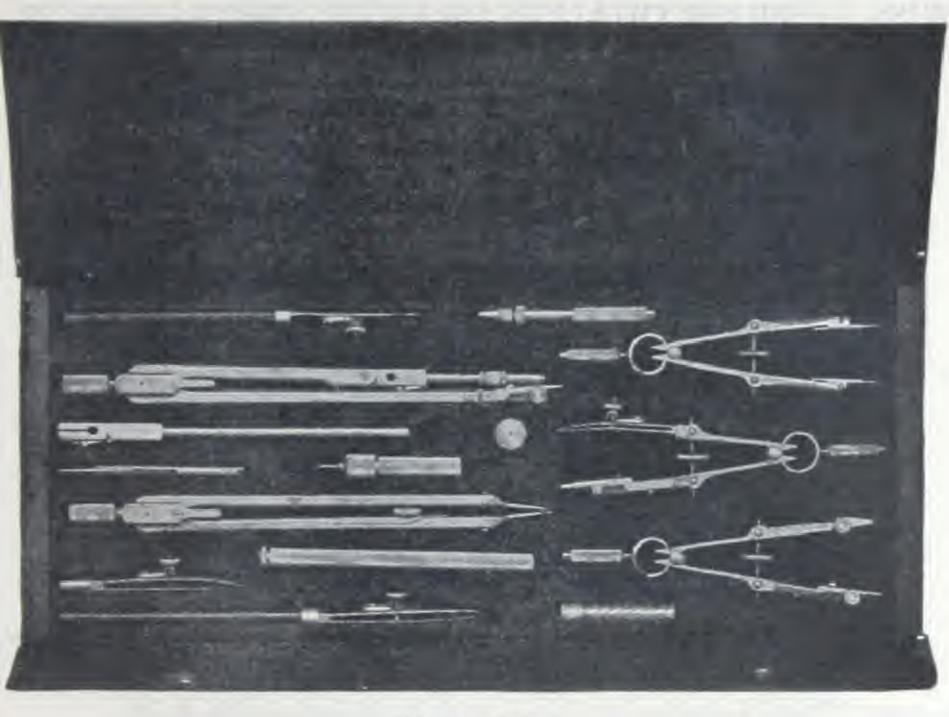
Needle Point, Pen, Pencil Point and Lengthening Bar,
6 in. Divider with Hair Line Spacing Attachment, 3½ in.

Spring Bow Pen, 3½ in. Spring Bow Pencil, 3½ in. Spring

Bow Divider, 4½ in. Spring Back Ruling Pen with release,

5¼ in. Spring Back Ruling Pen with release, Extra

Handle, Box of Leads, Key for Divider . each, \$25.00



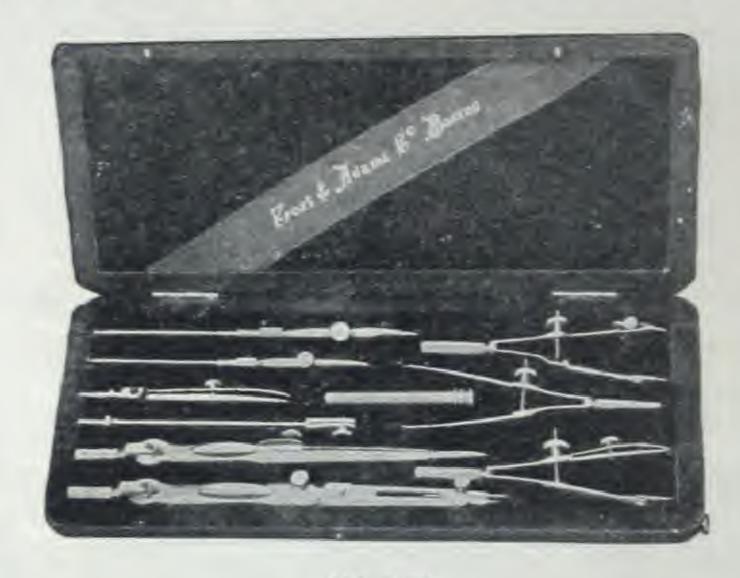
NO. 300 P. B.

No. 300 P. B. Case contains 15 pieces: 6¼ in. Divider with fixed
Needle Point, Pen, Pencil Point and Lengthening Bar
with Micrometer Attachment, 6 in. Divider with Hair
Line Spacing Attachment, centre adjustments, 4 in. Spring
Bow Pen with centre screw, 4 in. Spring Bow Pen with
Micrometer Adjustment, 4 in. Spring Bow Pencil with
Micrometer Adjustment, 4 in. Spring Bow Divider with
Centre Screw, 4¼ in. Spring Back Ruling Pen with release,
5¼ in. Spring Back Ruling Pen with release,
Extra
Handle for Ruling Pen, Box of Leads, Screw Driver each, \$20.00

This Case is made of Soft Morocco Leather with flaps, Chamois Lined

KERN & CO.'S

SWISS SUPERIOR QUALITY DRAWING INSTRUMENTS



NO. 660K

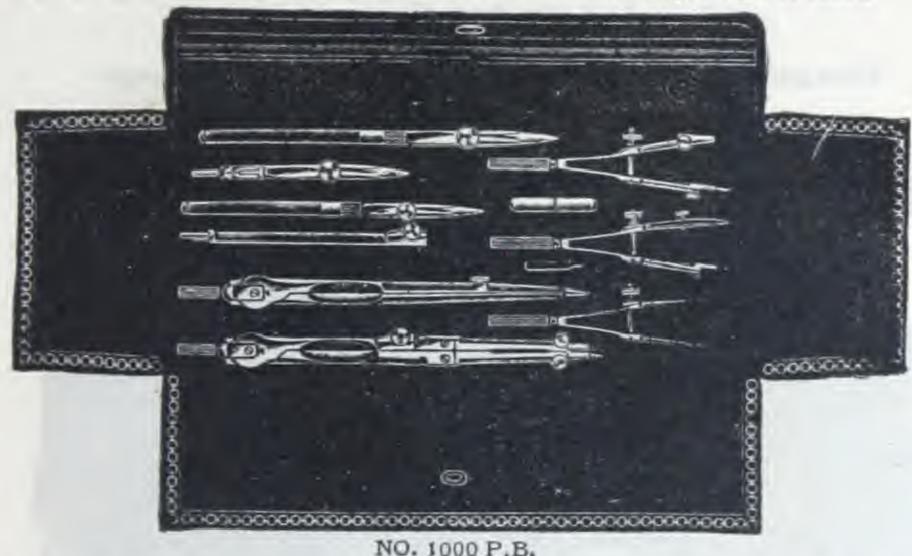
No. 660K. Case contains 11 pieces: 5½ in. Divider with fixed
Needle Point, Pen, Pencil Point and Lengthening Bar;
5 in. Divider with Hair Line Spacing Attachment, Spring
Bow Pen, Spring Bow Pencil, Spring Bow Divider,
4½ in. Spring Back Ruling Pen, 5½ in. Spring Back
Ruling Peu, Box of Leads, Key for Dividers . each, \$23.50

FROST & ADAMS CO.'S

FIRST QUALITY GERMAN SILVER INSTRUMENTS

FROST & ADAMS CO.'S POCKET BOOK CASES

First Quality German Silver Instruments The Case is made of Soft Morocco Leather with flaps, velvet lined



NO. 1000 P.B.

No. 1000 P.B. Case contains 11 pieces: 51/2 in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar; 5 in. Divider with Hair Line Spacing Attachment, Spring Bow Pen, Spring Bow Pencil, Spring Bow Divider, 41/2 in. Spring Back Ruling Pen, 5 in. Spring Back Ruling Pen, Box of Leads, Key for Dividers each, \$13.00

FROST & ADAMS CO.'S

HIGH GRADE SUPERIOR QUALITY INSTRUMENTS

Pocket Book Cases, Chamois Lined

No. 800 P.B. Case contains 11 pieces: 51/2 in. Divider with fixed Needle Point, Pen, Pencil Point and Lenthening Bar; 5 in. Divider with Hair Line Spacing Attachment, Spring Bow Pen, Spring Bow Pencil, Spring Bow Divider, 41/2 in. Spring Back Ruling Pen, 5 in. Spring Back Ruling Pen, Box of Leads, Key for Dividers . . each, \$18.00

Center Screws in the Bow Instruments of No. 2184 P.B.

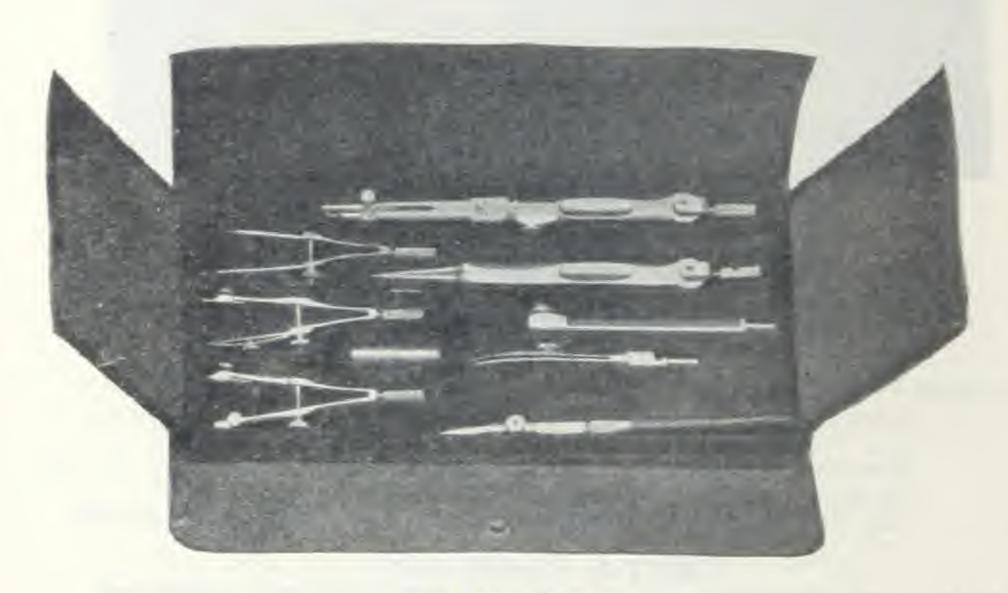
No. 900 P.B. Case contains 11 pieces: 51/2 in. Divider with fixed Needle Point, Pen, Pencil Point and Lengthening Bar; 5 in. Divider with Hair Line Spacing Attachment, Spring Bow Pen, Spring Bow Pencil, Spring Bow Divider, 41/2 in. Spring Back Ruling Pen, 5 in. Spring Back Ruling Pen, Box of Leads, Key for Dividers

FROST & ADAMS CO.'S

GERMAN SILVER INSTRUMENTS

In Pocket Book Cases

The Case is made of Soft Morocco Leather with flaps, velvet lined



NO. 3276 P. B.

FROST & ADAMS CO.'S

SPECIAL FINE GERMAN SILVER INSTRUMENTS

In Pocket Book Cases

The Gase is made of Soft Morocco Leather with flaps, velvet lined



NO. 2079 P. B.

No. 2079 P. B. Case contains 11 pieces: 5½ in. Divider with
fixed Needle Point, Pen, Pencil Point and Lengthening
Bar; 5 in. Divider with Hair Line Spacing Attachment,
Spring Bow Pen, Spring Bow Pencil, Spring Bow
Divider, 4½ in. Spring Back Ruling Pen, 5 in. Spring
Back Ruling Pen, Box of Leads, Key for Dividers each, \$8.50

ALTENEDER'S INSTRUMENTS IN MOROCCO-COVERED CASES.

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."



2000, Morocco-covered Case containing:

No. 1477, 3½-inch Compass, fixed pen and needle-point leg; No. 1479, 3½-inch Compass, fixed pencil and

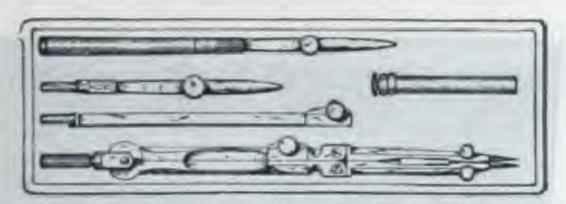
needle-point leg; No. 1613, 414-inch Ruling Pen \$10.75

2004. Morocco-covered Case containing:

No. 1474, 3½-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

Nos. 2000 and 2004 are furnished in Alteneder's Folding Pocket Case, instead of in Morocco-covered Case, at \$1.25 additional, and when desired should be specified thus: "No. 2004 in Alteneder Folding Pocket Case, \$10.75."

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons,"



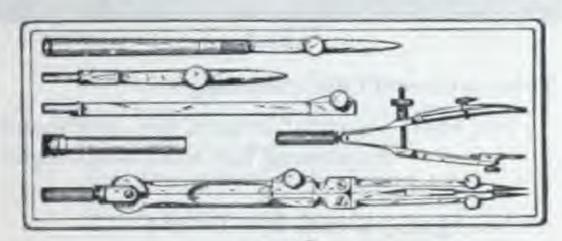
2044

2044. Morocco-covered Case containing:

No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

No. 1614, 5-inch Ruling Pen;

Nickel-plated lead case \$10.75



2046

2046. Morocco-covered Case containing:

No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

No. 1533, 314-inch Bow Pen;

No. 1614, 5-inch Ruling Pen;

2047. Morocco-covered Case containing:

No. 1434, 5½-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1533, 314-inch Bow Pen;

No. 1614, 5-inch Ruling Pen;

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."



2048

2048. Morocco-covered Case containing:

> No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

No. 1532, 314-inch Bow Pencil;

No. 1533, 314-inch Bow Pen;

No. 1614, 5-inch Ruling Pen;

Nickel-plated lead case \$15-75

2049. Morocco-covered Case containing:

> No. 1434, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1532, 314-inch Bow Pencil;

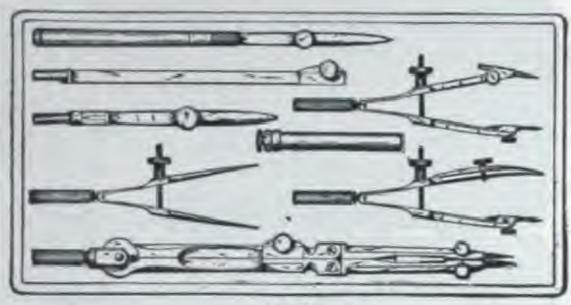
No. 1533, 314-inch Bow Pen;

No. 1614, 5-inch Ruling Pen;

Nickel-plated lead case \$17.25

Nos. 2044 to 2049 are furnished in Alteneder's Folding Pocket Case, instead of in Morocco-covered Case, at \$1.25 additional, and when desired should be specified thus: "No. 2046 in Alteneder's Folding Pocket Case, \$14.50."

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."



2050

2050. Morocco-covered Case containing:

No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

No. 1530, 314-inch Bow Spacer;

No. 1532, 314-inch Bow Pencil;

No. 1533, 314-inch Bow Pen;

No. 1614, 5-inch Ruling Pen;

2051. Morocco-covered Case containing:

No. 1434, 5 1/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

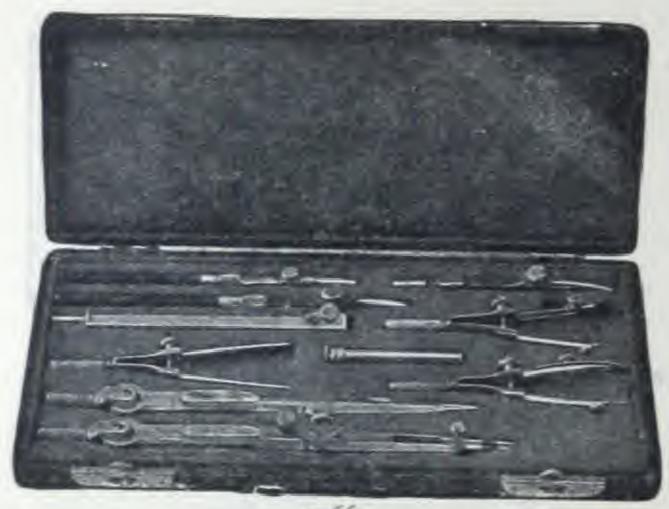
No. 1530, 314-inch Bow Spacer;

No. 1532, 31/4-inch Bow Pencil;

No. 1533, 314 inch Bow Pen;

No. 1614, 5-inch Ruling Pen;

Nos. 2050 and 2051 are furnished in Alteneder's Folding Pocket Case, instead of in Morocco-covered Case, at \$1.25 additional, and when desired should be specified thus: "No. 2050 in Alteneder's Folding Pocket Case, \$19.00." Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."



2066

2066. Morocco-covered Case containing:

No. 1404, 514-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

No. 1423, 5-inch Hair-spring Divider;

No. 1530, 314 -inch Bow Spacer; No. 1532, 314 -inch Bow Pencil;

No. 1533, 34 inch Bow Pen;

No. 1613, 414 inch Ruling Pen;

2067. Morocco-covered Case containing:

No. 1434, 5 1/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1423, 5-inch Hair-spring Divider;

No. 1530, 34-inch Bow Spacer;

No. 1532, 34 -inch Bow Pencil;

No. 1533, 314 inch Bow Pen; No. 1613, 414 inch Ruling Pen;

No. 1614, 5-inch Ruling Pen;

ALTENEDER'S FOLDING POCKET CASE.

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."



ALTENEDER'S INSTRUMENTS IN FOLDING POCKET CASES.

Each instrument is stamped either "T. Alteneder & Sons," "T. A."
or "T. A. & Sons."

2068.	Alteneder Folding Pocket Case containing:	
	No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;	
	No. 1423, 5-inch Hair-spring Divider;	
	No. 1530, 314-inch Bow Spacer;	
	No. 1532, 34-inch Bow Pencil;	
	No. 1533, 34 inch Bow Pen;	
	No. 1613, 414-inch Ruling Pen;	
	No. 1614, 5-inch Ruling Pen;	
	Nickel-plated lead case	\$24.75
2070.	Alteneder Folding Pocket Case containing:	
	No. 1434, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;	
	No. 1423, 5-inch Hair-spring Divider;	
	No. 1530, 314-inch Bow Spacer;	
	No. 1532, 314-inch Bow Pencil;	
	No. 1533, 314-inch Bow Pen;	
	No. 1613, 414 inch Ruling Pen;	
	No. 1614, 5-inch Ruling Pen;	
	Nickel-plated lead case	\$26.25

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."

2072. Morocco-covered Case containing:

No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

No. 1423, 5-inch Hair-spring Divider;

Nos. 1530, 1532 and 1533, 314-inch Spring Bow Instruments;

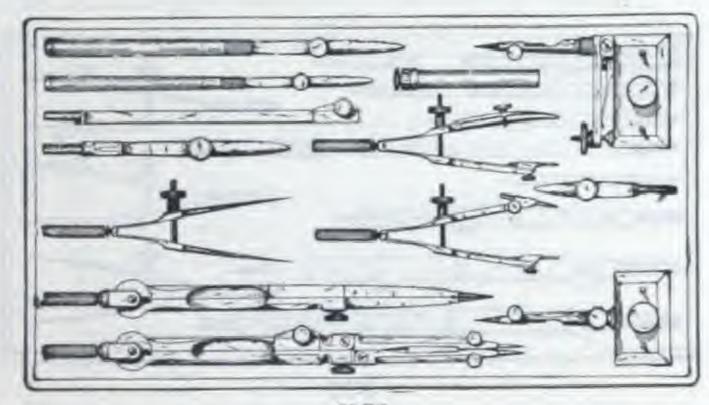
No. 1613, 414-inch Ruling Pen; No. 1614, 5-inch Ruling Pen;

No. 1670, Small size Beam-compass;

Nickel-plated lead case

\$31.00

\$32.50



2073

2073. Morocco-covered Case containing:

No. 1434, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1423, 5-inch Hair-spring Divider;

Nos. 1530, 1532 and 1533, 314-inch Spring Bow Instruments;

No. 1613, 414-inch Ruling Pen;

No. 1614, 5-inch Ruling Pen;

No. 1670, Small size Beam-compass;

Nickel-plated lead case

No. 2072 in Alteneder's Folding Pocket Case, \$32.50. No. 2073 in Alteneder's Folding Pocket Case, \$34.00.

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons,"

2076. Morocco-covered Case containing:

No. 1404, 5 1/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

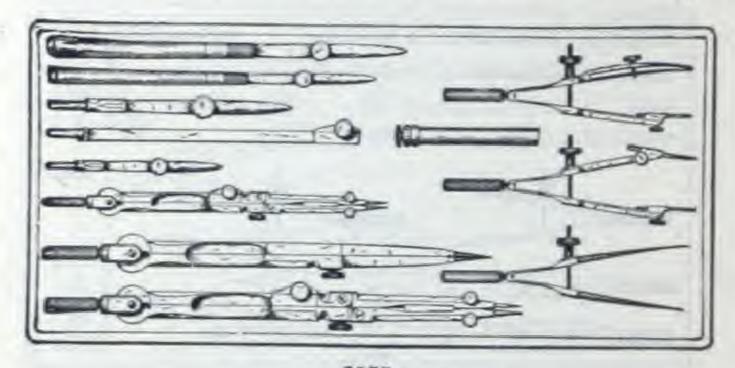
No. 1470, 31/2-inch Compass, pen and pencil, fixed needle-point leg;

No. 1423, 5-inch Hair-spring Divider;

Nos. 1530, 1532 and 1533, 34-inch Spring Bow Instruments;

No. 1613, 414-inch Ruling Pen; No. 1614, 5-inch Ruling Pen; Nickel-plated lead case

\$30.00



2077

2077. Morocco-covered Case containing:

No. 1434, 5 1/2 inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1490, 3½-inch Compass, pen and pencil, fixed needle-point leg with hairspring adjustment;

No. 1423, 5-inch Hair-spring Divider;

Nos. 1530, 1532 and 1533, 34-inch Spring Bow Instruments;

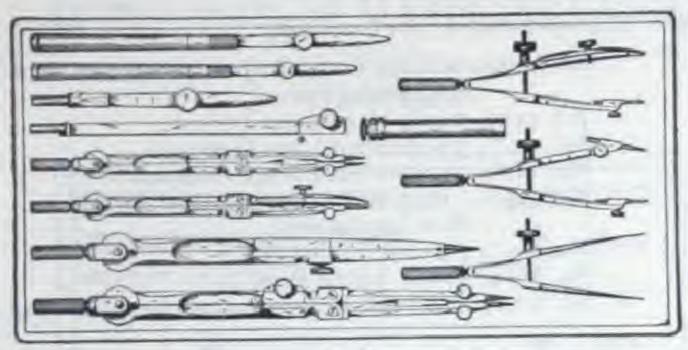
No. 1613, 414-inch Ruling Pen; No. 1614, 5-inch Ruling Pen;

\$33.00

No. 2076 in Alteneder's Folding Pocket Case, \$31.50. No. 2077 in Alteneder's Folding Pocket Case, \$34.50.

Nickel-plated lead case

Each instrument is stamped either "T. Alteneder & Sons," "T. A."
or "T. A. & Sons."



2078

2078. Morocco-covered Case containing:

No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

No. 1423, 5-inch Hair-spring Divider; No. 1477, 31/2-inch fixed pen Compass;

No. 1479, 31/2-inch fixed pencil Compass;

Nos. 1530, 1532 and 1533, 314-inch Spring Bow Instruments;

No. 1613, 44-inch Ruling Pen;

No. 1614, 5-inch Ruling Pen \$32.00

2079. Morocco-covered Case containing:

No. 1434, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1423, 5-inch Hair-spring Divider;

No. 1497, 31/2-inch fixed pen Compass with hair-spring adjustment;

No. 1499, 31/2-inch fixed pencil Compass with hair-spring adjustment;

Nos. 1530, 1532 and 1533, 314-inch Spring Bow Instruments;

No. 1613, 414-inch Ruling Pen;

No. 1614, 5-inch Ruling Pen \$36.50

No. 2078 in Alteneder's Folding Pocket Case, \$33.50. No. 2079 in Alteneder's Folding Pocket Case, \$38.00. Each instrument is stamped either "T. Alteneder & Sons," "T. A."
or "T. A. & Sons,"

2080. Morocco-covered Case containing:

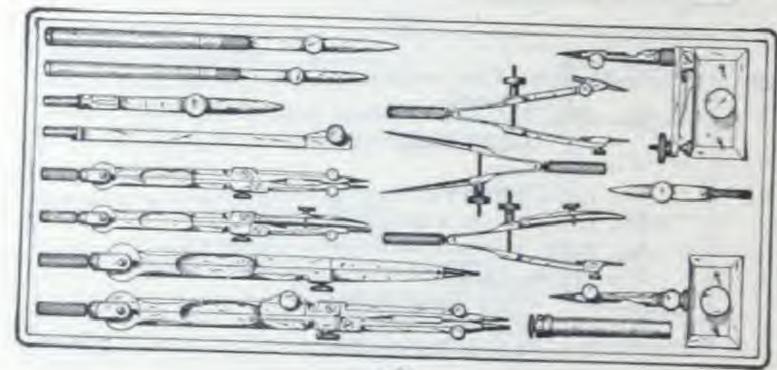
No. 1404, 5 1/2-inch Compass, pen, pencil and lengthening bar;

No. 1423, 5-inch Hair-spring Divider; No. 1477, 31/2-inch fixed ben Compass; No. 1479, 31/2-inch fixed pencil Compass;

Nos. 1530, 1532 and 1533, 34 inch Spring Bow Instruments;

No. 1613, 44 inch Ruling Pen; No. 1614, 5 inch Ruling Pen;

No. 1670, Small size Beam-compass \$39.50



2081

2081. Morocco-covered Case containing:

No. 1434, 5 1/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1423, 5-inch Hair-spring Divider;

Nos. 1497 and 1499, 3 1/2-inch fixed pen and fixed pencil Compasses with hair-spring adjustment;

Nos. 1530, 1532 and 1533, 314-inch Spring Bow Instruments;

Nos. 1613 and 1614, Ruling Pens; No. 1670, Small size Beam-compass

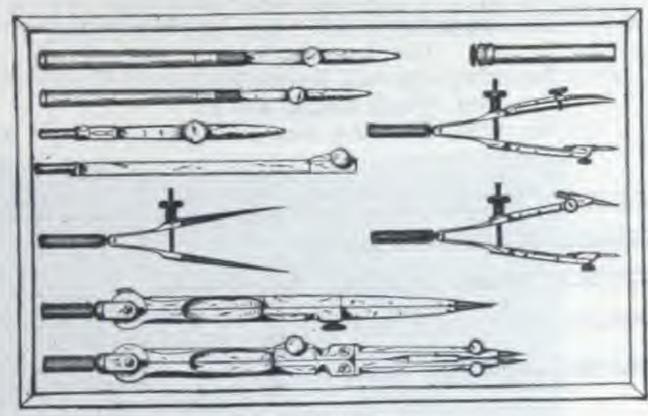
\$44.00

No. 2080 in Alteneder's Folding Pocket Case, \$41.00. No. 2081 in Alteneder's Folding Pocket Case, \$45.50.

\$29.00

ALTENEDER'S INSTRUMENTS IN MAHOGANY CASES.

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."



2102 Mahogany Case with lock, loose cushion and tray. Size of tray 5 x 8 inches, containing : No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg; No. 1423, 5-inch Hair-spring Divider; Nos. 1530, 1532 and 1533, 314-inch Spring Bow Instruments; No. 1613, 414-inch Ruling Pen; No. 1614, 5-inch Ruling Pen . . \$27.50 2103. Mahogany Case with lock, loose cushion and tray. Size of tray 5 x 8 inches, containing : No. 1434, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment; No. 1423, 5-inch Hair-spring Divider; Nos. 1530, 1532 and 1533, 314-inch Spring Bow Instruments; No. 1613, 414 inch Ruling Pen; No. 1614, 5-inch Ruling Pen

Each instrument is stamped either "T. Alteneder & Sons," "T. A."
or "T. A. & Sons."

2120. Mahogany Case with lock, loose cushion and 6 x 91/2-inch tray, containing:

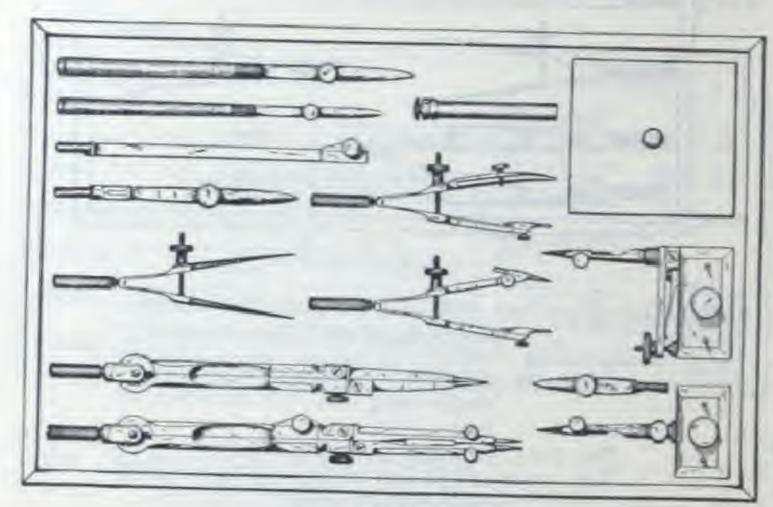
No. 1404, 51/2-inch Compass, pen, pencil and lengthening bar;

No. 1423, 5 inch Hair-spring Divider;

Nos. 1530, 1532 and 1533, 314 inch Spring Bow Instruments;

No. 1613, 44 inch Ruling Pen; No. 1614, 5-inch Ruling Pen;

No. 1670, Small size Beam-compass \$35.25



2121

2121. Mahogany Case with lock, loose cushion and 6 x 91/2-inch tray, containing:

No. 1434, 51/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1424, 5-inch Hair-spring Divider;

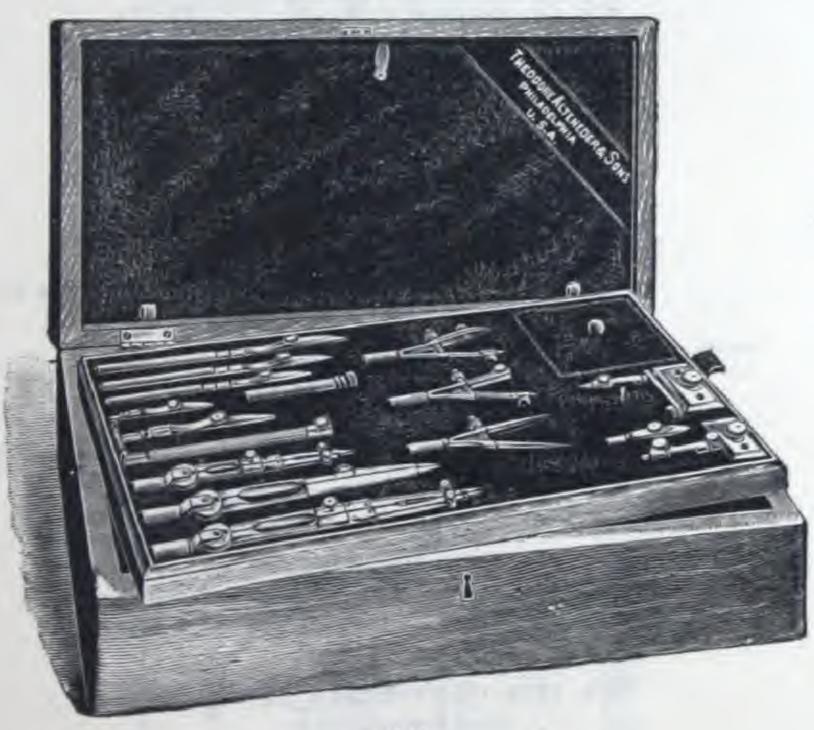
Nos. 1530, 1532 and 1533, 34-inch Spring Bow Instruments;

No. 1613, 44-inch Ruling Pen; No. 1614, 5-inch Ruling Pen;

No. 1670, Small size Beam-compass . . . \$37.75

ALTENEDER'S INSTRUMENTS IN MAHOGANY CASES.

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons,"



2124

Each instrument is stamped either "T. Alteneder & Sons," "T. A."
or "T. A. & Sons,"

2124. Mahogany Case with lock, loose cushion and tray, Size of tray 6¼ x 13¼ inches, containing:

> No. 1404, 5 1/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg;

No. 1423, 5-inch Hair-spring Divider;

No. 1470, 31/2-inch Compass, pen and pencil, fixed needle-point leg;

Nos. 1530, 1532 and 1533, 34-inch Spring Bow Instruments;

No. 1613, 44-inch Ruling Pen;

No. 1614, 5-inch Ruling Pen;

No. 1615, 51/2-inch Ruling Pen;

No. 1671, Large size Beam-compass;

Nickel-plated lead case

544.50

2125. Mahogany Case with lock, loose cushion and tray.

Size of tray 64 x 134 inches, containing:

No. 1434, 5 1/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;

No. 1424, 5-inch Hair-spring Divider;

No. 1490, 31/2-inch Compass, pen and pencil, fixed needle-point leg with hairspring adjustment;

Nos. 1530, 1532 and 1533, 314 anch Spring Bow Instruments;

No. 1613, 44 inch Ruling Pen;

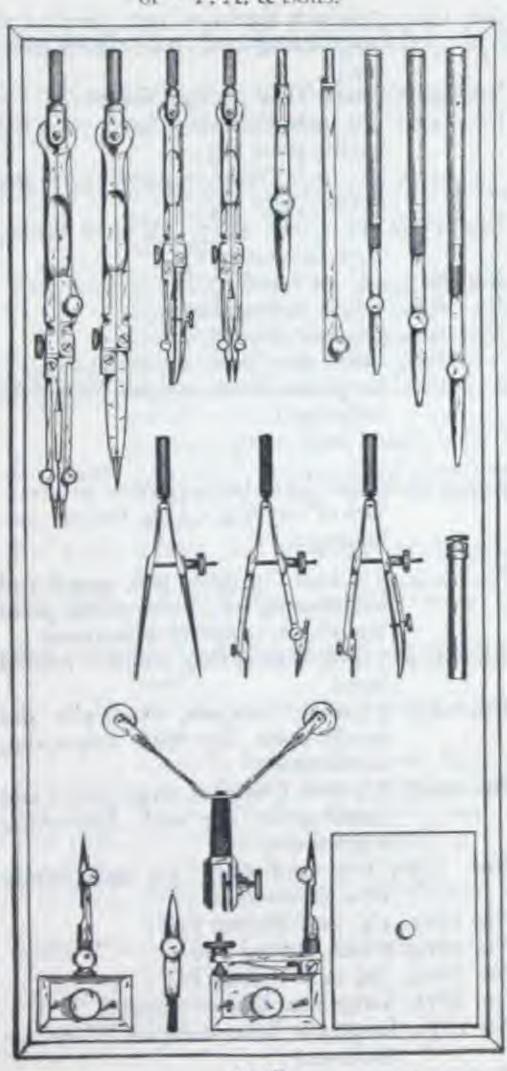
No. 1614, 5-inch Ruling Pen;

No. 1615, 51/2-inch Ruling Pen;

No. 1671, Large size Beam-compass;

ALTENEDER'S INSTRUMENTS IN MAHOGANY CASES.

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."



2127

Fach instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."

2126,	Mahogany Case with lock, loose cushion and tray. Size of tray 64 x 134 inches, con- taining:	7/1
2127.	No. 1404, 5½-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg; No. 1423, 5-inch Hair-spring Divider; No. 1477, 3½-inch Compass, fixed pen and needle-point leg; No. 1479, 3½-inch Compass, fixed pencil and needle-point leg; Nos. 1530, 1532 and 1533, 3¼-inch Spring Bow Instruments; No. 1613, 4¼-inch Ruling Pen; No. 1614, 5-inch Ruling Pen; No. 1615, 5½-inch Ruling Pen; No. 1671, Large size Beam-compass; No. 1676, Large size Beam-compass Wheel Attachment; Nickel-plated lead case Mahogany Case with lock, loose cushion and tray.	
	taining:	
	No. 1434. 5½-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment; No. 1424. 5-inch Hair-spring Divider, jointed legs; No. 1497. 3½-inch Compass, fixed pen and needle-point leg with hair-spring adjustment; No. 1499, 3½-inch Compass, fixed pencil and needle-point leg with hair-spring adjustment;	
	Nos. 1530, 1532 and 1533, 3¼-inch Spring Bow Instruments; No. 1613, 4¼-inch Ruling Pen; No. 1614, 5-inch Ruling Pen; No. 1615, 5½-inch Ruling Pen; No. 1671, Large size Beam-compass; No. 1676, Large size Beam-compass Wheel Attachment:	
	Nickel-plated lead case	\$54.50

\$75.00

ALTENEDER'S INSTRUMENTS IN MAHOGANY CASES.

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons,"

 Mahogany Case with lock, loose cushion and tray. Size of tray 6½ x 14¾ inches, containing:
No. 1434, 5½-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring adjustment;
No. 1423, 5-inch Hair-spring Divider;
No. 1497, 31/2-inch Compass, fixed pen and needle-point leg with hair-spring adjustment;
No. 1499, 3½-inch Compass, fixed pencil and needle-point leg with hair-spring adjustment;
No. 1575, 4-inch Self-adjusting needle-point Bow Pen;
No. 1580, 314-inch Bow Spacer, center ad- justment;
No. 1582, 314 inch Bow Pencil, center adjust- ment;
No. 1585, 314-inch Bow Pen, center adjust- ment;
No. 1613, 414-inch Ruling Pen, ivory handle;
No. 1614, 5-inch Ruling Pen, ivory handle;
No. 1615, 51/2-inch Ruling Pen, ivory handle;
No. 1656, 5-inch Pricker, ivory handle;
No. 1672, Small size Beam-compass;
No. 1675, Small size Wheel Attachment for Beam-compass;
Eight White Edge Scales, 12-inch, as in set No. 2775;
Nickel-plated lead case

ALTENEDER'S INSTRUMENTS IN MAHOGANY CASES.

Each instrument is stamped either "T. Alteneder & Sons," "T. A." or "T. A. & Sons."

2138. Mahogany Case with lock, loose cushion and tray.

Size of tray 7 x 1414 inches, containing:

No. 1434. 51/2-inch Compass, Spring-hinge Pen, pencil and lengthening bar, fixed needle-point leg with hairspring adjustment;

No. 1423, 5-inch Hair-spring Divider; No. 1453, 41/2-inch Hair-spring Divider;

No. 1497, 3½-inch Compass, fixed Springhinge Pen and needle-point leg with hair-spring adjustment;

No. 1499, 31/2-inch Compass, fixed pencil and needle-point leg with hair-spring adjustment;

No. 1540, 414 inch Bow Spacer;

No. 1575, 4-inch Self-adjusting needle-point Bow Pen;

No. 1580, 314-inch Bow Spacer, center adjustment;

No. 1582, 34-inch Bow Pencil, center adjustment;

No. 1584, 314-inch Bow Pen, center adjustment, with Spring-hinge Pen;

No. 1600, 44 inch Spring-hinge Ruling Pen, ivory handle;

No. 1602, 5-inch Spring-hinge Ruling Pen, ivory handle;

No. 1604, 5 1/2 inch Spring-hinge Ruling Pen, ivory handle;

No. 1632, 6-inch wide blade Ruling Pen, aluminum handle;

No. 1656, 5-inch Pricker, ivory handle;

No. 1673, Large size Beam-compass with Spring-hinge Pen;

No. 1676, Large size Beam-compass Wheel Attachment;

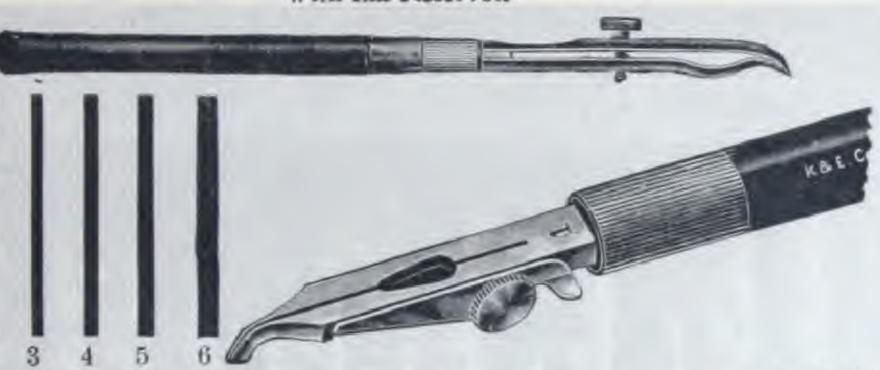
No. 2861, One dozen 1/2-inch German-silver thumb tacks;

Twelve White Edge Flat Scales, 12-inch, as in set No. 2776;

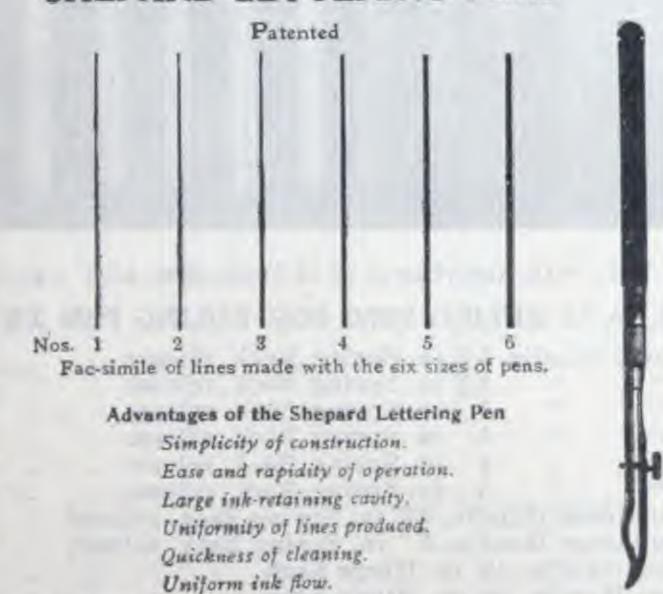
Nickel-plated lead case \$100.00

PAYZANT LETTERING PENS (Freehand)

With Ink Reservoir

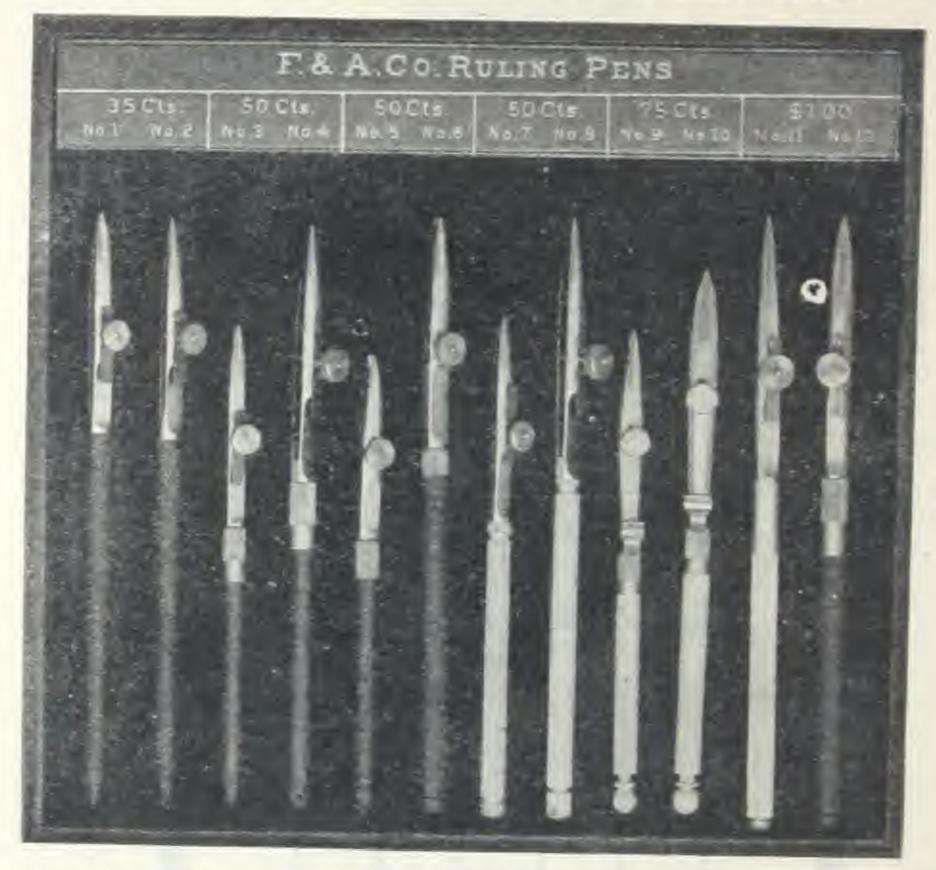


SHEPARD LETTERING PENS



pard German Silver Lettering Pens, Nos. 1, 2, 3, 4, 5, 6, each, \$1.35 or Block Letters and Border Lines

FROST & ADAMS CO.'S RULING PEN TRAY



61

Ruling Pen Tray with Assortment of 12 Pens, Nos. 1-12 per tray, \$6.50

SEPARATE RULING PENS FOR RULING PEN TRAY

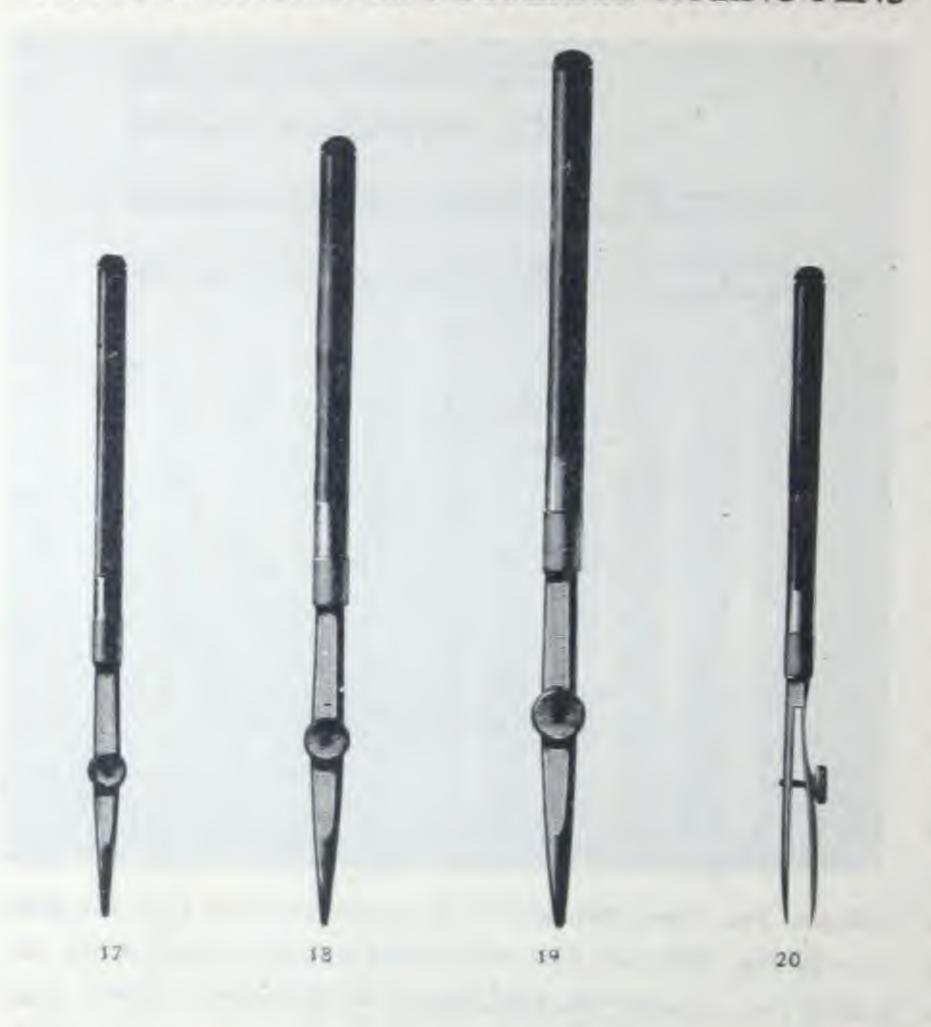
No. 1.	Ebony Handle, 54 in. Spring Back, release .		Seed av
0	ii ii ei ei e e e e e e e e e e e e e e		each, 35
- 21	94 III. Spring Back, release .		.35
21.	4 in. Spring Back, release		The second second
	in Chaine Deal and	100	.50
4.	D In Spring Back, release		** .50
õ.	4 in. Spring Back, release .	-	
	in Coming Back, Iclease .		.50
6.	o in Spring Back, release		.50
7.	Aluminum Handle, 414 in. Spring Back, release		-170
	Tandic, 4,4 in. Spring Back, release	*	.50
0.	Aluminum Handle, 5 in. Spring Back, release		.50
.9.	Bone Handle, 414 in. Hinge Back	-	
	Done Handle, 434 In. Hinge back		75
10.	Bone Handle, 51/2 in. Hinge Back		" 75
11.	Aluminum Handle til in Both n		
100	Aluminum Handle, 54 in. Spring Back, release	8	1 00
12,	Ebony Handle, 54 in. Spring Back, release		1.00

FROST & ADAMS CO'S RULING PENS



Ruling Pen,	5½ i	nch .				2.			each.	\$1.00
14	51/2	" with	Hinge	and	Pin				14	.75
14	534	£6.	iii.			de l			116	.65
44	5	1.6	0	and l	Pin				4.6	1.00
41	4	4K	ir	10			4		11	.85
30	4	11	Tr.			+	+		4.0	.65
14.	5	H .			4				6.1.	.50
-11	51/2	" with	Pin						4.0	.65
15	with	Three A	djustal	ble P	aris			+	1.6	1.25
10.	with	Five				*			6.1	2 00
14	5 inc	h Metal	Handl	e				4	44	.75
-11	6 "		**				ý.		60	1.00
Railroad Per	n, Ivo	ory Hand	lle .	4					i.c	2.25
Dotting Pen				4	4				43	.90
Ruling Pen,				dle			1	40	11.	1.00
**	5	**	- 66						11	1.25
311	4	iii	**		4	1011			11.	1.00
38	434	**	10		and	Plott	y P	oint	10	1.00
- 11	434	44	66				***		46.	1.20
21	53%	**	i.c				10		11	1.50
36	614	11	66		61		**		44	1.75

FROST & ADAMS CO'S SUPERIOR RULING PENS



16.	Improv	ed Dotting	Pen wit	h 1 set o	of Wh	eels,	6 v	arieti	ies	each,	\$1.00
17.	Ruling	Pen, 4 inch,	Ebony	Handle	19		-	4		14	1.10
18,	- 13	5	24	0.	3.	4	2			KT	1.25
19.	91	51/2	11	iii				+		44	1.25
20.	44	734	11	43.	with	Spri	ng	Nib		40	1.15

FROST & ADAMS CO'S SUPERIOR RULING PENS

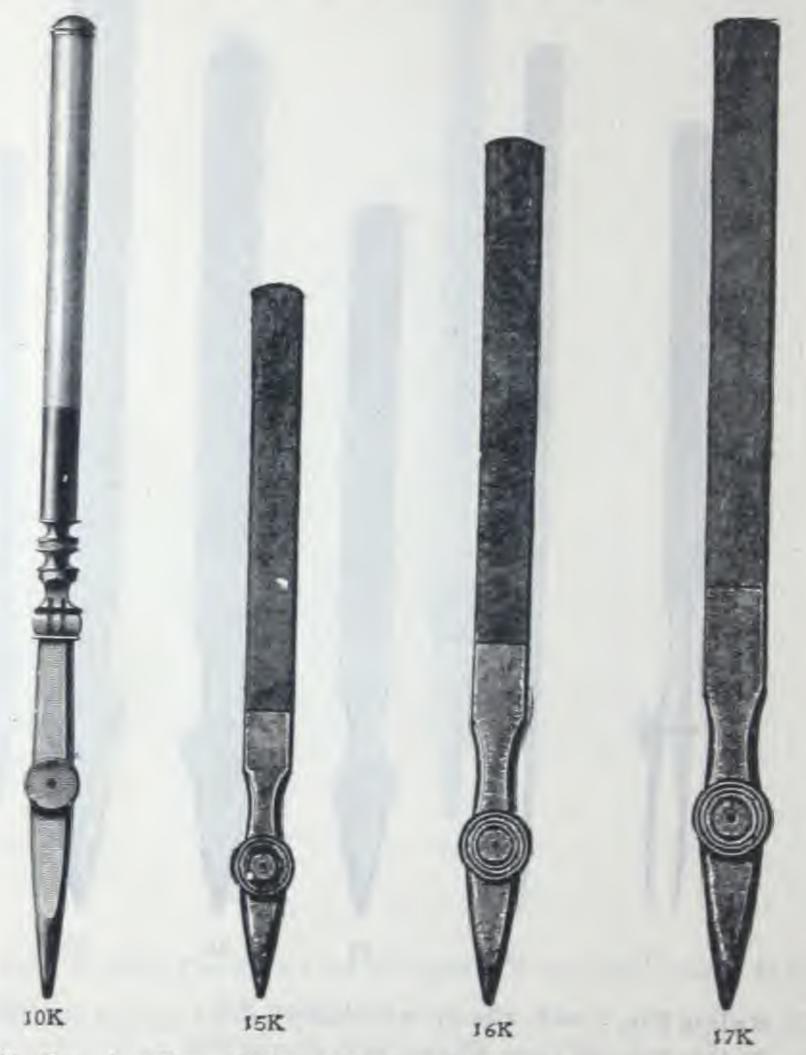


Ruling Pen, 5 inch, Ebony, with Spring Nib	3		each,	\$1.65
Ruling Pen, 51/2 inch, Ebony, with Spring Nib			1.0	1.90
Swedish Ruling Pen for Broad Lines, Ebony, 5	inch	4	14	1.75
Swedish Ruling Pen for Broad Lines, Ebony, 6	inch	2	35	2.00
Swedish Ruling Pen for Broad Lines, Ebony, 7	inch		- 60	2.25

KERN & CO.'S

GENUINE SUPERIOR SWISS DRAWING PENS

Light Model with Perfect Points



No. 10K.	Drawing	Pen,	61/2	in.,	Joint a	and Pin.	Ivory	Han	dia	onel.	en no
15K.	10	16	5	30	Ebony	Handle	-1942	Aran	are	each,	100000
16K,	44	44		10	se.	11				14	2.00
17K.	44	11	7	36	-11					**	2.25
						1.0			2.	16	2.50

FROST & ADAMS CO'S SUPERIOR RAILROAD PENS

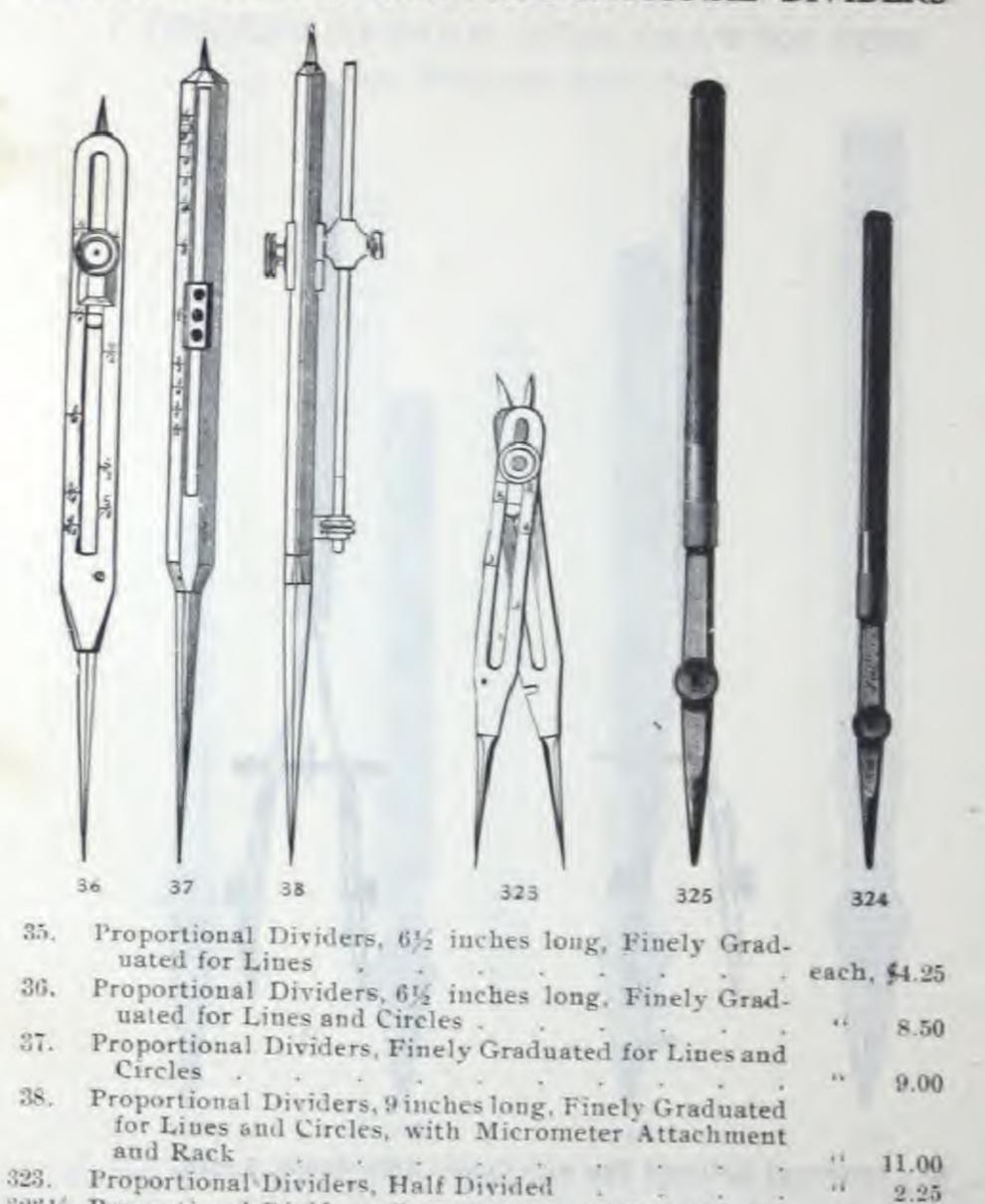


15	Improved Ra	ailroad I	en wi	ith (Centi	re Adju	stn	nent,	5 inc	h,		
	Ebony Ha	ndle.	0	al.	14	9 1	è	1.87		*	each,	\$4.50
151/	Improved	Railroad	Pen	4 11	nch.	Ebony	н	andle			11	3.50

324.

325.

FROST & ADAMS CO'S PROPORTIONAL DIVIDERS



3231/2. Proportional Dividers, German Silver, Half Divided .

XX

2.50

.20

.30

KERN & CO.'S

GENUINE SUPERIOR SWISS INSTRUMENTS



No. 72K.	Drop Handle Spri	ing Boy	w Pen,	self ad	justin	g .	each	. \$3.00
73K.	11 11	ri.	**	**	Pe	ncil P	of "	4.25
4K.	Spring Bow Pen, Ebony Handle					sprin	~	
5K	Spring Bow Pen,			Made			. "	1.00
	Ebony Handle				with.	sprin	g,	1.10
6K.	Spring Bow Pen,	5½in.	, upper	r blade	with	sprin	g,	
	Ebony Handle				4		. 0	1.20

ALTENEDER'S Non-detachable Pen Screw.

Patented Jan. 19th, 1897.

In pens of the spring-blade and ordinary hinge-joint pattern the adjusting-screw must be removed when cleaning, and is often mislaid, or slips from the fingers, to be lost or trodden upon. The improved screw obviates this disadvantage; a collar securely fastened upon the shank, serves to retain it in the upper blade when the points are separated for cleaning, thus:



and prevents its possible consequent loss. To draughtsmen located at a distance from an instrument maker the non-detachable screw affords a protection well worth the extra cost. It adds 15c, to the price of an instrument, and when desired should be specified thus:

" No. 1614 with non-detachable screw, \$1.80."

Graduated Pen Screws.

The ability to adjust, or re-adjust, the pen-blades for a certain width of line without the usual method of trial and comparison must seem desirable to anyone who does much pen-work, and some of our customers have found the graduated screws here illustrated to be practically efficient in this respect. We will furnish any of our instruments with such a graduated screw for 10 cents additional, and when desired it should be specified thus:

"No. 1615 with graduated screw, \$2.00."

ALTENEDER'S Spring-hinge Ruling Pen.

Each instrument is stamped with the trade-mark "T. A. & Sons."

Pat. Aug. 9th, '92; May 7th, '95.



ALTENEDER'S Spring-hinge Ruling Pen.

Each instrument is stamped with the trade-mark "T. A. & Sons."
Pat. Aug. 9th, '92; May 7th, '95.

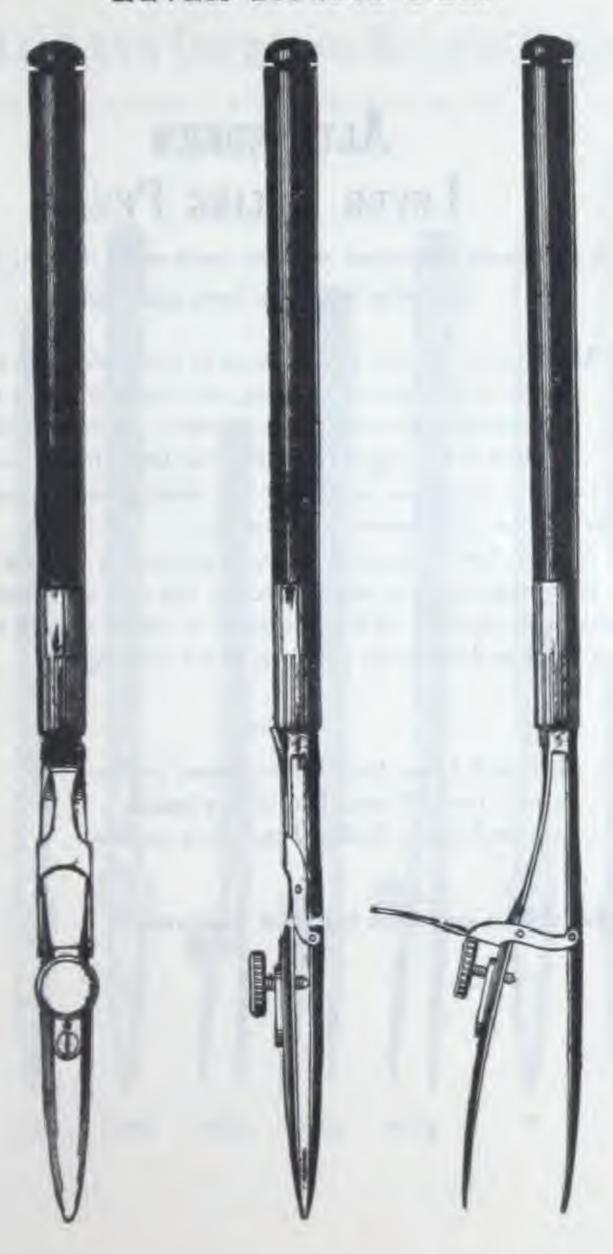
HE Spring-hinge Pen consists of one fixed and one movable blade. The shank of the latter is accurately fitted to a groove in the former, and has a conical hole, fitting a fulcrum-pin screwed through the sides of the groove, which permits the taking up of any lost motion due to wear. A long stiff spring, carried by the fixed blade, acts upon the short lever end of the movable blade-as in a penknife-holding it open to an angle of ninety degrees for cleaning, and firmly pressing it towards the fixed blade when closed for use, The distance between the blades is regulated by an adjusting-screw, which is threaded into both the movable blade and a split nut,-attached thereto for the purpose of maintaining a uniform friction on the screw and preventing it from becoming loose by wear. The end of the adjusting screw is pointed and enters a countersink in the fixed blade, insuring an absolutely accurate alignment of the two blades, even in the improbable case of lost motion in the joint. To clean the pen it is only necessary to raise the upper blade, as shown in illustration, without disturbing the adjusting-screw.

PRICES.

1600.	44-inch Spring-hinge Ruling Pen, ebon- handle	\$2.90
1602.	5-inch Spring-hinge Ruling Pen, ebony handle	2,90
1604.	51/2-inch Spring-hinge Ruling Pen, ebony handle	2.90

Furnished with aluminum handle if preferred.

ALTENEDER'S LEVER RULING PEN.



ALTENEDER'S LEVER RULING PEN.

Each instrument is stamped with the trade-mark "T. A. & Sons."
Pat. May 7th, '95; Sept. 29th, '96.

HE Lever Ruling Pen is made in one piece, with the upper blade in the form of a spring, the action of which is such as to constantly press the points together. The adjusting-screw is fitted to the upper instead of the lower blade, and merely bears against the inner surface of the latter; thus separating the points to obtain the desired width of line.

A lever, having parallel arms, is pivoted to the lower blade, and is provided with a bar connecting the two arms and located between the blades. When the lever is lifted, the bar raises the upper blade and holds the points apart for cleaning.

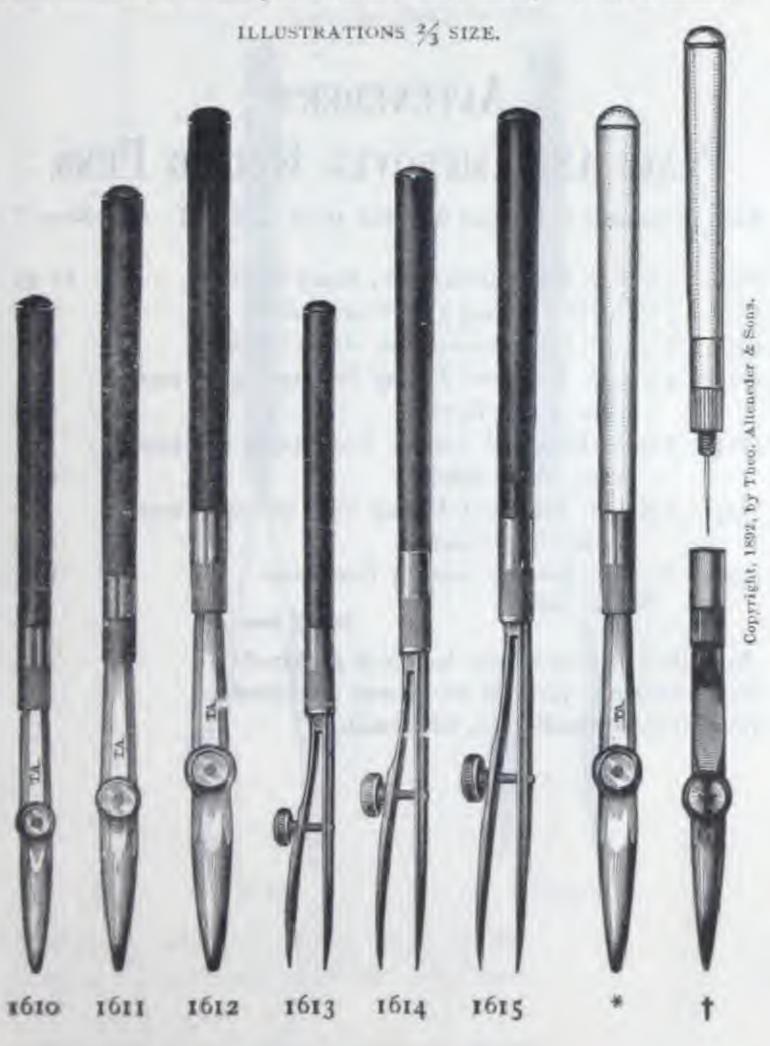
PRICES.

	44-inch Lever Ruling Pen, ebony handle	114	\$2.50
	5-inch Lever Ruling Pen, ebony handle .	100	2.50
1609.	51/2-inch Lever Ruling Pen, ebony handle	1	2.50

Furnis ed with aluminum handle if preferred.

ALTENEDER'S PLAIN AND IMPROVED RULING PENS.

Each instrument is stamped with the trade-mark, "T. A. & Sons."



ALTENEDER'S PLAIN AND IMPROVED RULING PENS.

Each instrument is stamped with the trade-mark "T. A. & Sons."

1610.	44 inch Plain Ruling Pen, ebony handle	\$1.25
1611.	5-inch Plain Ruling Pen, ebony handle	1.50
1612.	5 1/2-inch Plain Ruling Pen, ebony handle	1.75
1613.	414-inch Improved Ruling Pen, spring on upper	100
	blade, ebony handle	1.40
1614.	5-inch Improved Ruling Pen, spring on upper	
	blade, ebony handle	1.65
1615.	532-inch Improved Ruling Pen, spring on upper	- 100
	blade, ebony handle	1.90
1620.	Morocco-covered case for three pens	1.25

Furnished with aluminum handle if preferred.

*Ivory handle in place of ebony 20c, additional

†Pricker-point handle 45c, additional.

7 - 1

ALTENEDER'S RAILROAD PEN AND RAILROAD PENCIL.

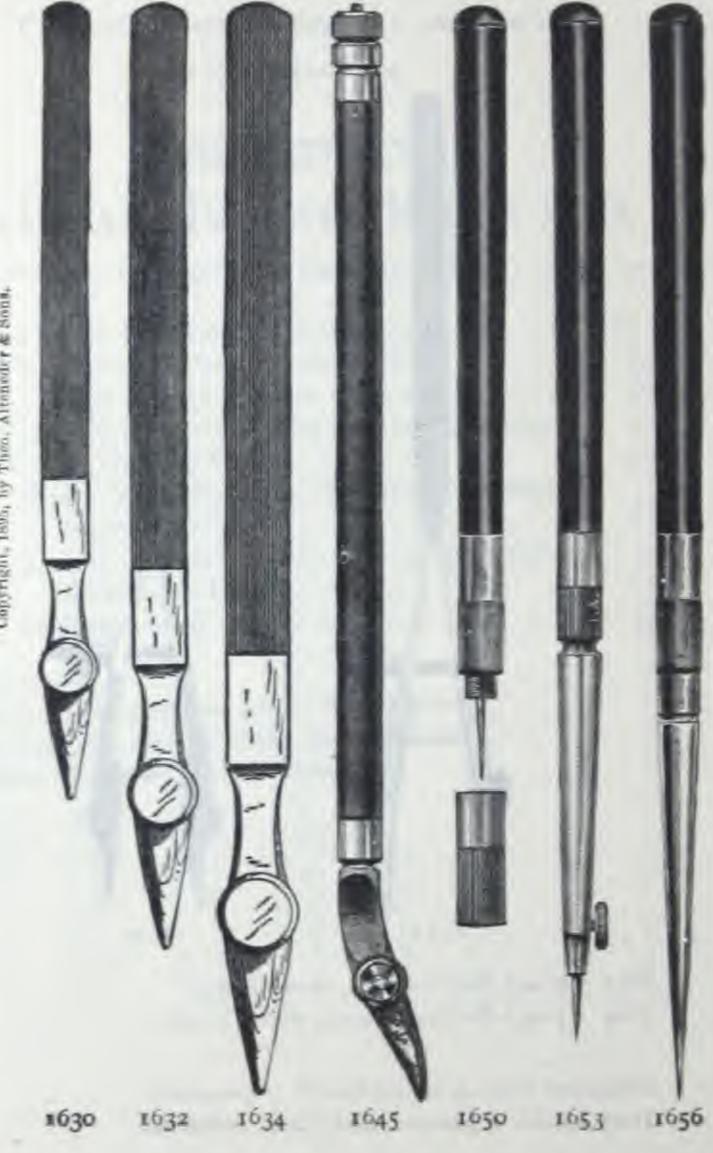
Each instrument is stamped with the trade-mark "T. A."



1623.	5-inch Railroad Pen, ebony handle	\$3.50
1624.	5-inch Railroad Pencil, ebony handle	3.50

Furnished with aluminum handle if preferred. Ivory handle in place of ebony 20c. additional.

ALTENEDER'S PENS AND PRICKERS.



ALTENEDER'S PENS AND PRICKERS.

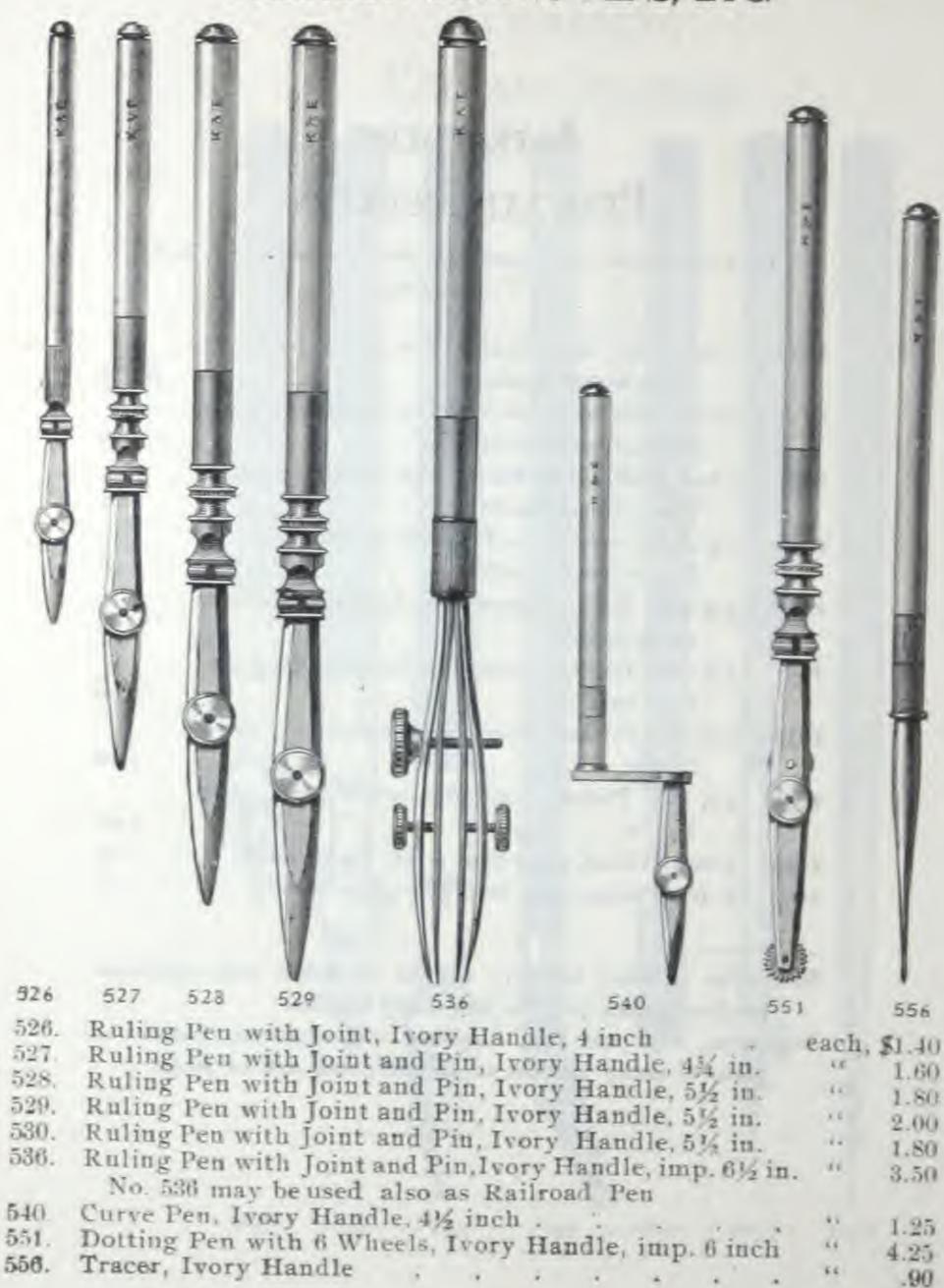
Each instrument is stamped with the trade-mark "T. A." or "T. A. & Sons."

1630.	5-inch wide blade Ruling Pen, spring on upper	
	blade, ebony handle	\$1.75
1 632.	6-inch wide blade Ruling Pen, spring on upper	
	blade, ebony handle	2,00
1634.	7-inch wide blade Ruling Pen, spring on upper	
	blade, ebony handle	2.25
1645.	434 -inch Swivel Curve Pen, spring on upper blade,	
	hollow metal handle	2.00
1650.	31/2-inch Pricker, screw cap, fixed needle-point,	
	ebony handle	0.70
1651.	31/2-inch Pricker, screw cap, fixed needle-point,	
	ivory handle	0.90
1653.	4 1/2-inch Pricker, removable needle-point, ebony	
	handle	1.00
1654.	41/2-inch Pricker, removable needle-point, ivory	
	handle	1.20
1656.	5-inch Pricker, taper steel point, ebony handle .	1.00
1657.	5-inch Pricker, taper steel point, ivory handle	1.20

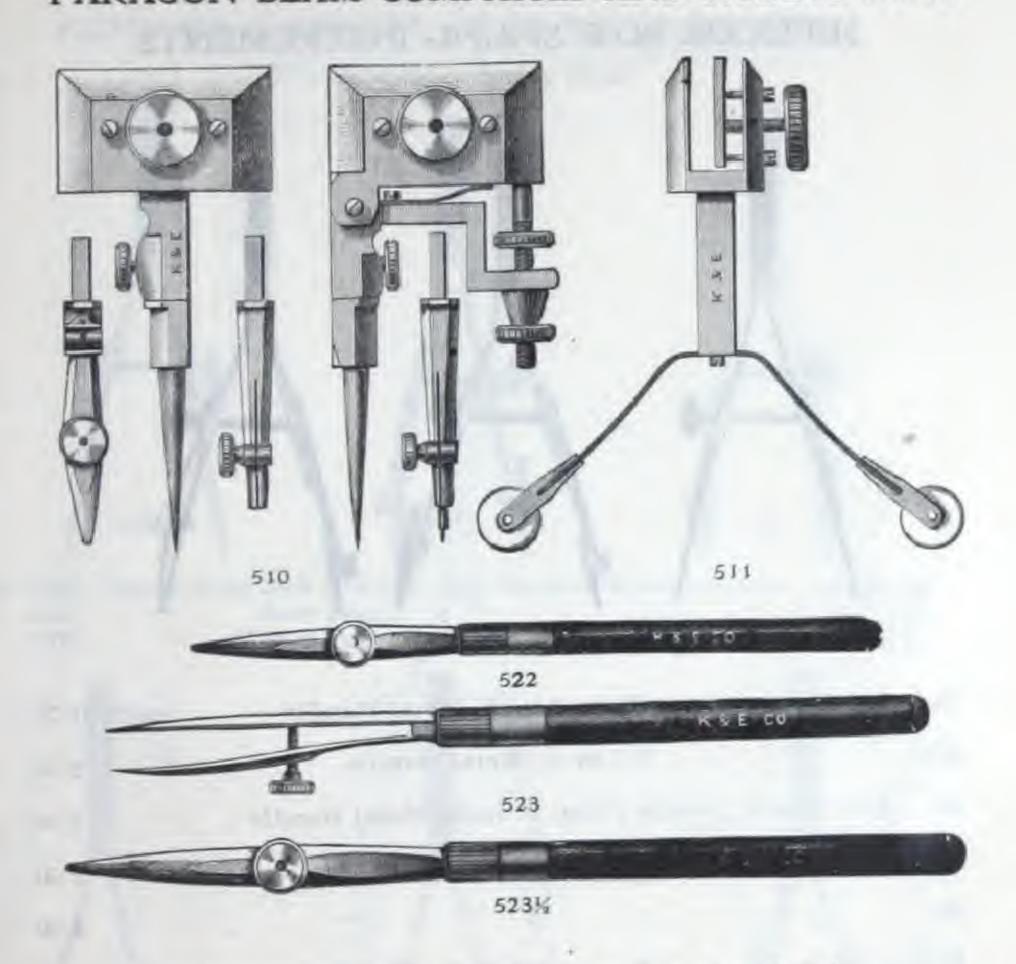
Nos. 1650 to 1657 inclusive will be furnished with aluminum handles at same price as with ebony handles.

Nos. 1630, 1632 and 1634 furnished with aluminum handles in place of ebony handles at an additional cost of \$0.50.

PARAGON RULING PENS, ETC.

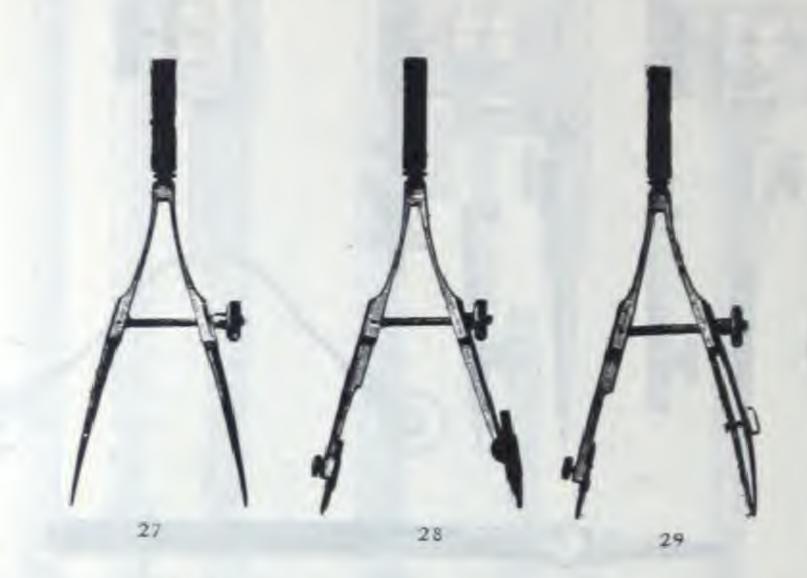


PARAGON BEAM COMPASSES AND RULING PENS



510.	Beam Compasses, with 2 Steel Points, Pen, Penci	land		
	Needle Point	*	each,	\$9.00
511.	Wheel Attachment for No. 510		11	2.25
	Morocco Case for No. 510		14	1.25
	Morocco Case for No. 510 and 511	300	11	1.75
522.	Ruling Pen, upper blade with spring, 41/2 inch	-	8.6	1.10
528.	Ruling Pen, upper blade with spring, 5 inch .	3	***	1.20
	. Ruling Pen, upper blade with spring, 51/2 inch	*	44	1.35

FROST & ADAMS CO'S SUPERIOR BOW SPRING INSTRUMENTS



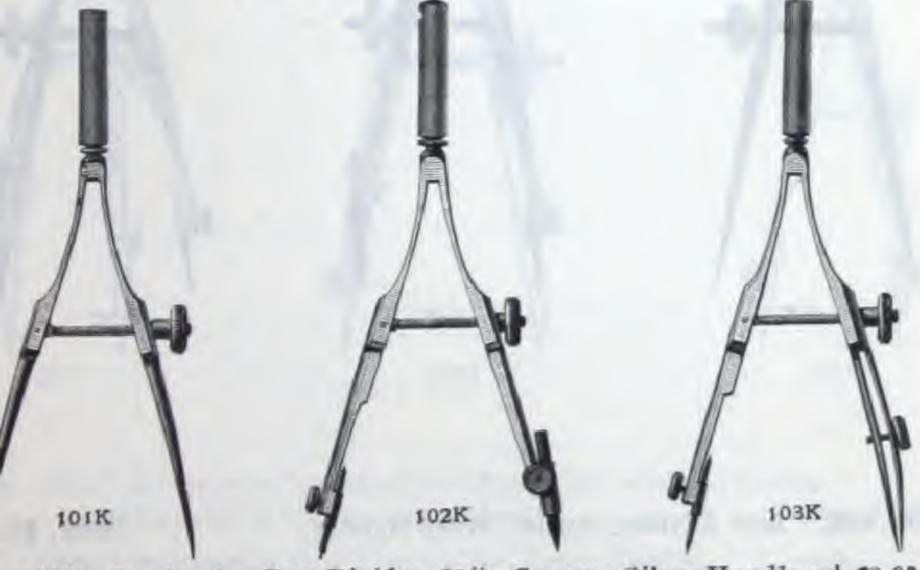
24.	Spacing Div	giders, Plain	, 3 inch, M	Ietal .	Han	dle	- 6	each,	\$1.75
24%	6. "	" 3½ in	ich, Metal	Hand	lle			in.	2.00
25.	Bow Pencil,	Needle Poi	ut, 3 inch	, Met	al H	and	le .	./3	2.50
25/4	. **	40	31/2 "		166			10	2.50
26.	- 11	in	3 "		1.6			ci	2.50
261/2		-12	33/2 "		14			iki	2.50
27.	Steel Spacin	g Dividers,	3 inch .			10		11	1.50
28.	Steel Bow P								1.75
29.	Steel Bow P	en, Needle 1	Point, 3 inc	ch				44	1.75
2240.	Spacing Div	ider, 3 inch,	Metal Ha	ndle				- 10	1.25
2241.	Bow Pen, 3 i	nch, Metal	Handle					16	1.50
2242.	Bow Pencil,	3 inch, Meta	I Handle					**	1.50

GENUINE SUPERIOR SWISS INSTRUMENTS

The Pens Have Spring Blade



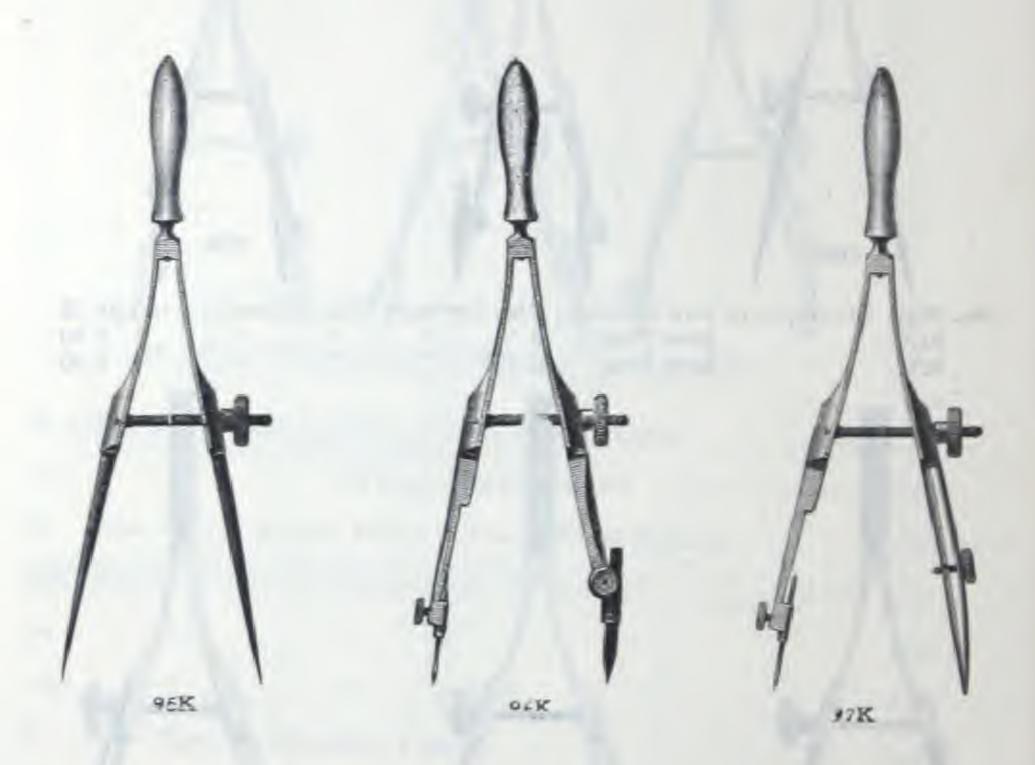
91K. Steelspring Bow Divider, 3 in., German Silver Handle each, \$1.75 91K. "Bow Pencil, 3 " " 2.50 92K. "Bow Pen, 3 " " " 2.50



102K. Steelspring Bow Divider, 3½ in. German Silver Handle each, \$2.00 102K. "Bow Pencil, 3½ "" " 2.60 103K. "Bow Pen, 3½ " " " 2.60

GENUINE SUPERIOR SWISS INSTRUMENTS

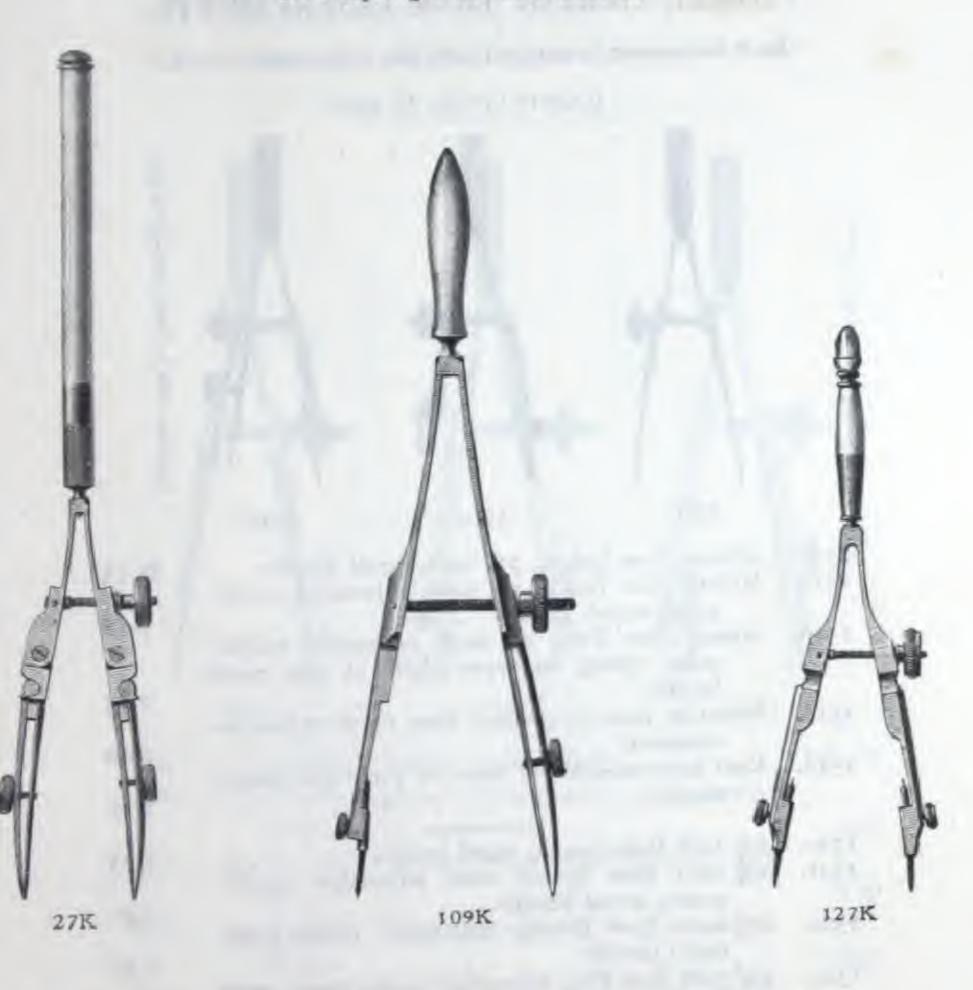
Bow Spring Pen, Pencil and Divider



No.95K.	Bow Divider	3½ in.	, Ivory	Handle	4		each,	\$2.00
96K.	Bow Pen,	31/2 "	11	46	C (a)		0.	2.50
97K.	Bow Pencil,	31/4 "	110	66		37	11	9.50

GENUINE SUPERIOR SWISS INSTRUMENTS

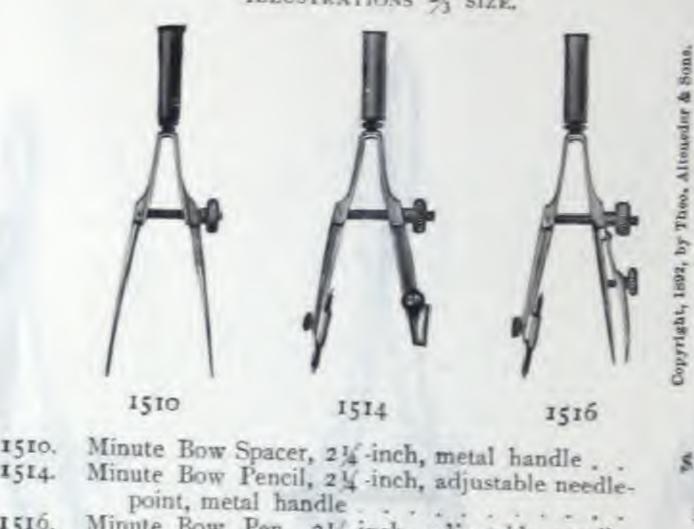
Bow Spring Pens and Divider



lo.	27K.	Steelspring Bow Railroad Pen, with joints to	blades	
		din shanks, 51/2 in., Ivory Handle		\$4.00
	109K.	Steelspring Bow Pen, 41/4 in., Ivory Handle	each,	3.00
		Steelspring Bow Divider with two Needle		3.00

Each instrument is stamped with the trade-mark "T. A."

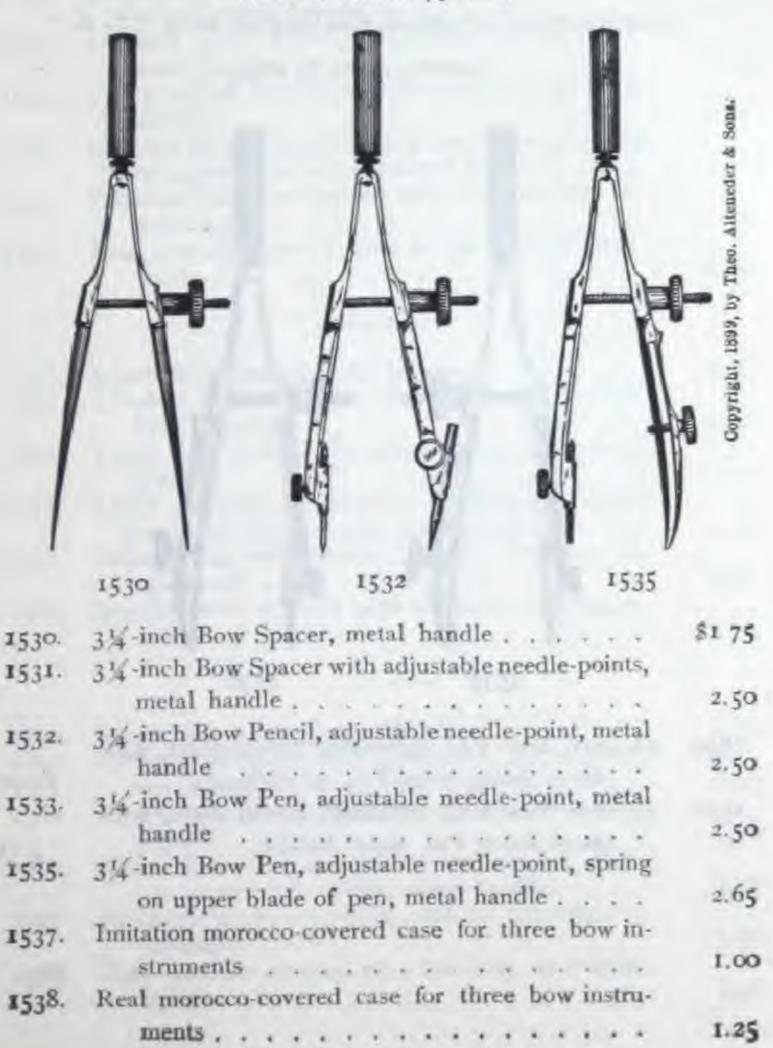
ILLUSTRATIONS 3/ SIZE.



	-3	1514	1510	
1510.	Minute Bow S	pacer, 214 inch, me	etal handle	\$1.7
1514.	writing DOM 1	encil, 24 inch, ad	justable needle-	\$1.75
1516.	point, sprii	en, 24-inch, adj	of pen metal	2.75
1517.	STREET TOOLO	cco-covered case for	or three how in-	2.75
1518.	accus morocon-	covered case for th	ree bow instru-	1.00
	ancors		*****	1.25
1520.	2弘-inch Bow S	pacer, metal handle	a a	2000
1521.	214 Inch Bow	Spacer with adju	istable needle-	1.75
1522.	214-inch Bow metal handl	Pencil, adjustable		2.50
1523.	24-inch Bow P	en, adjustable need	lle-point, metal	2.50
1525.	214 inch Bow P	en, adjustable need	le-point, spring	2.50
1527.	Imitation moroc	co-covered case for	andle	2.65
1528.	Real morocco-co	wered case for the	ee bow instead	1.00
	ments, , ,			1.25

Each instrument is stamped with the trade-mark "T. A."

ILLUSTRATIONS 2/3 SIZE.



Each instrument is stamped with the trade-mark "T. A."

ILLUSTRATIONS 2/3 SIZE.

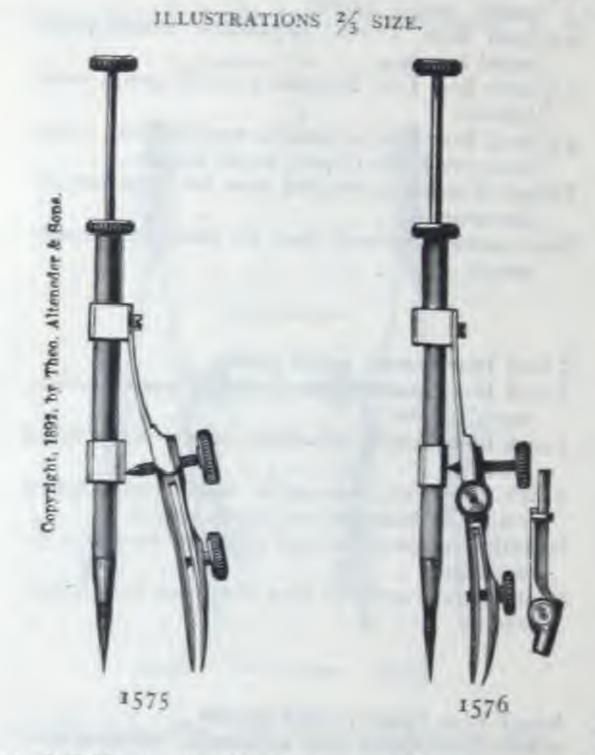


Each instrument is stamped with the trade-mark "T. A."

1540.	44 inch Bow Spacer, metal handle	\$2.50
1541.	points metal handle	3.25
1542.	44-inch Bow Pencil, adjustable needle-point, metal handle	3.25
1543.	44-inch Bow Pen, adjustable needle-point, metal	3.25
1545.	44-inch Bow Pen, adjustable needle-point, spring on upper blade of pen, metal handle	3.40
1547.	Imitation morocco-covered case for three bow in-	1.25
	instruments	*:-3
1548.	Real morocco-covered case for three bow instru- ments	1.65
1550.	5-inch Bow Spacer, metal handle	3.25
1551.	5-inch Bow Spacer with adjustable needle-points,	
	metal handle	4.00
1552.	5-inch Bow Pencil, adjustable needle-point, metal	4.00
	5-inch Bow Pen, adjustable needle-point, spring	4,000
1555.	on upper blade of pen, metal handle Imitation morocco-covered case for three bow in-	4.15
1557.	struments	1.25
1558.	Real morocco-covered case for three bow instru-	. 6-
-	ments	1.65
1560.	6-inch Bow Spacer, metal handle	4.00
1561.	6-inch Bow Spacer with adjustable needle-points,	5.00
	6-inch Bow Pencil, adjustable needle-point, metal	2.54
1562.	handle.	5.00
1565.	6 inch Row Pen, adjustable needle-point, spring	
	on upper blade of pen, metal handle	5.15
1567.	Imitation morocco-covered case for three bow in-	1.50
1568.	Real morocco-covered case for three bow instru-	
1500.	ments, , , , , , , , , , , , , , , , , , ,	1.90

With Self-adjusting Needle-point.

Each instrument is stamped with the trade-mark "T. A. & Sons,"



1575. 1576.	4-inch Self-adjusting Needle-point Bow Pen 4-inch Self-adjusting Needle-point Bow Pen and	\$4.00
*****	Pencil.	5.00
1578.	Real morocco-covered case for No. 1575	1.00
1579.	Real morocco-covered case for No. 1576	1.00

Center Adjustment.

Each instrument is stamped "T. Alteneder & Sons, Phila."

ILLUSTRATIONS 3/3 SIZE.



EAGLE PENCIL COMPASS AND EAGLE DIVIDER



No. 576. In introducing this Pencil Compass we present an implement which will prove very desirable for School use

It is made of highly finished nickel and has steel joints that will not wear out easily

The pencil attachment is secured by a lever, which makes it impossible for the pencil to slip

The practical advantages of this Compass will be readily seen and its cheapness will make it very popular

FROST & ADAMS CO'S NICKEL PLATED SCHOOL INSTRUMENTS



4200.	Ruling Pen, Ebony Handle, 5 inch	each, .25
4201.	White Bone Handle and Pin, 51/2 inch .	.35
4205.	Dividers, 51/2 inch, Nickel Plated	.30
4208.	Compasses, 51/2 inch, with Pencil Point, Nickel Plated	.45
4210.	Nickel Plated	.60
4211.	Compasses, 5½ inch, with Pen and Pencil Points and Lengthening Bar, Nickel Plated	.75

This line of low priced Instruments is a great improvement over the French Brass Instruments

FRENCH BRASS INSTRUMENTS

For Schools

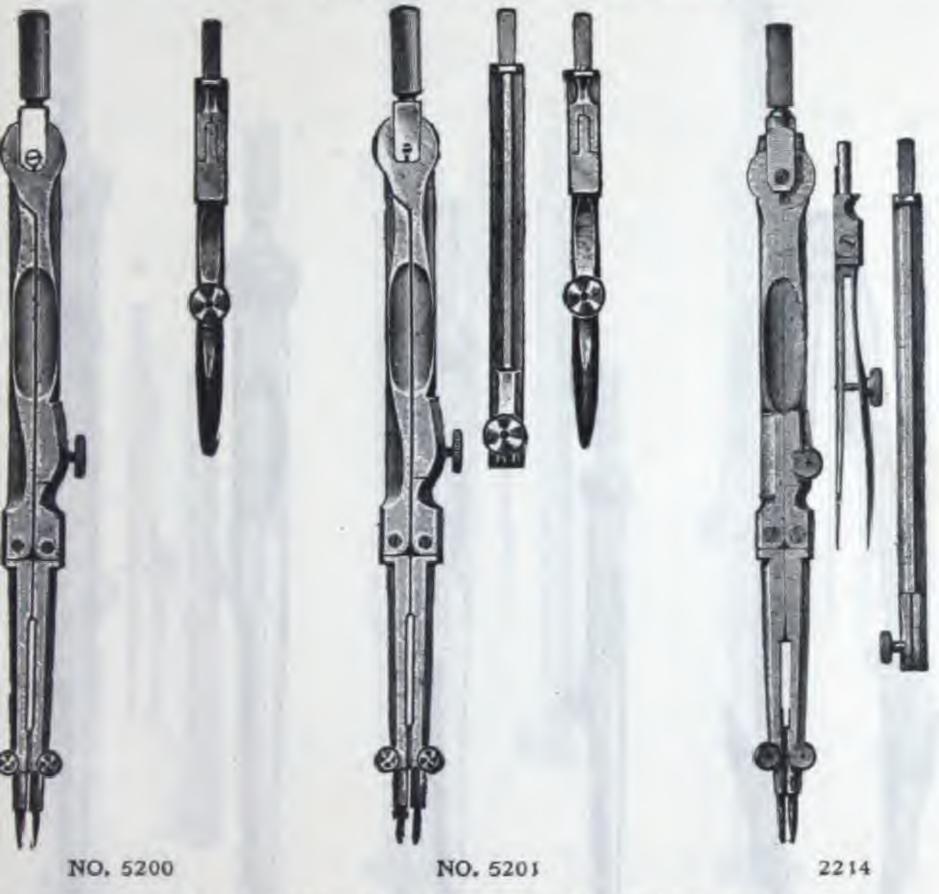


305.	Dividers,	Screw Joint,	31/2	inches long					each,	.25
306.	8.0	100	43%	47					4.0	.30
307.	41	110	536	14					**	.38
308.	ir	10	63%	-14	4	*	*		4.6	.45
309.	15	Rivet Head,	43/2	43.	*				44	.20
310.	14.	41	534	116					4.6	.30
311.	15	-110	63/2	100			-		**	.35
314.	Dividers,	41/2 inches lo	ng,	with Pen an	d P	encil	Poir	its -		
		ngthening Ba			14	4	*			.60
315.	Dividers,	6 inches lon	g,	with Pen an	d P	encil	Poir	nts		
	and Le	ngthening Ba	r .	* *	+	+			at.	.75
316.	Dividers,	Needle Point	, 43	4 inches lon	g, v	vith P	епа	ba		
	Pencil 1	Points and Le	ngt	hening Bar	+				44	.75
317.	Dividers,	Needle Poin	t, B	inches long	S, 11	vith P	en a	nd		
	Pencil 1	Points and Le	ngt	hening Bar		4			44. 1	1.00
318.	Dividers,	3 inches long	, w	ith Pen and	Pen	cil Po	ints	4	61	.60

FROST & ADAMS CO.'S

GERMAN SILVER DRAWING INSTRUMENTS

High Grade, Wrought Metal, Superior Quality



No. 5200. 5½ in. Divider with fixed Needle Point, Pen and
Pencil Points, Box of Leads and Key per set, \$1.40
5201. 5½ in. Divider with fixed Needle Point, Pen and Pencil Points and Lengthening Bar; Box of Leads and Key per set, 1.65
2204. High Grade Set: 5½ in. Divider with fixed Needle
Point, Pen and Pencil Points and Lengthening Bar per set, 3.25
2214. High Grade Set: 5½ in. Divider with fixed Needle
Point, Pen and Pencil Points and Lengthening Bar, Box
of Leads and Key per set, 4.00
065. 5½ in. Plain Divider each, .75

GENUINE SUPERIOR SWISS DRAWING INSTRUMENTS

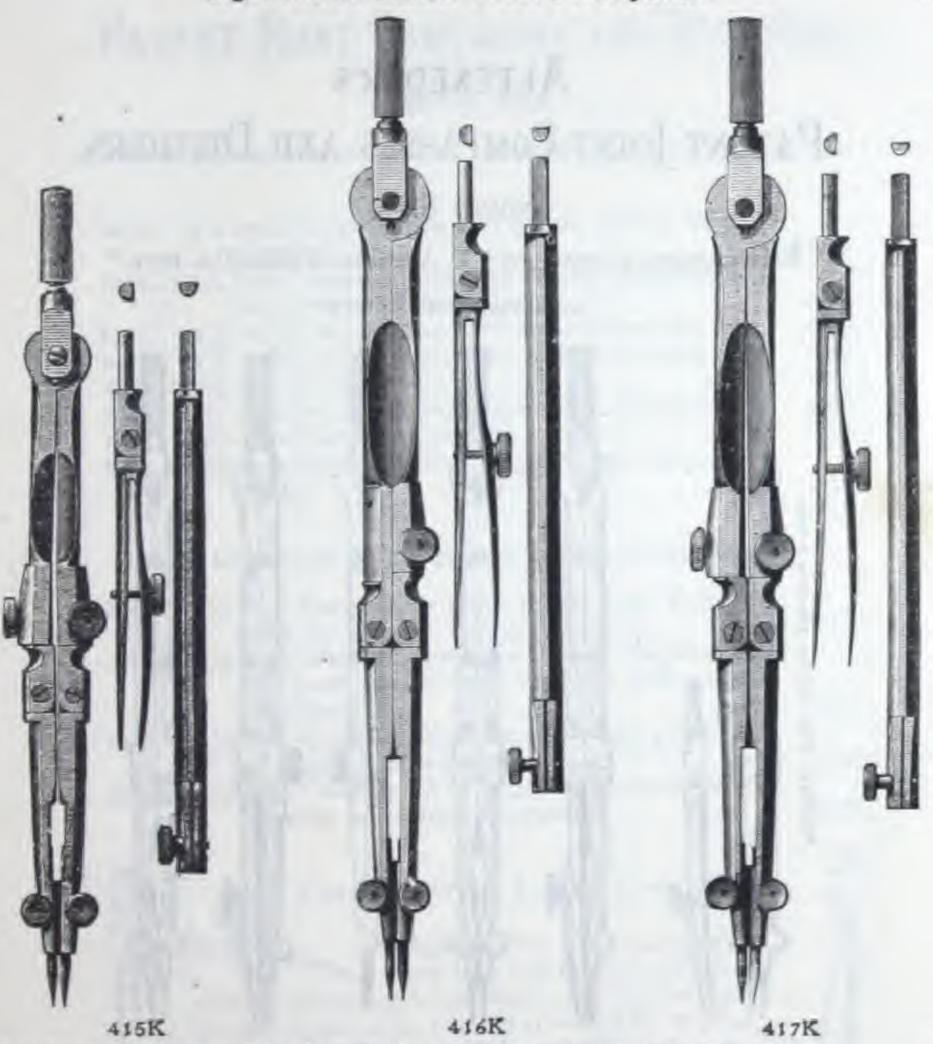
Light Model with Perfect Pivot Pointed Heads



No. 163K.	Pocket Con	pass, wit	th fo	oldi	ng	poin	ts	1 9	-	each,	\$10.00
305K.	Hairspring	Divider,	31/2	in.						14	3.50
306K.	11	11	41/2	10			-		-	110	3.75
307K.	1.6	34	5	16	4			99		.6.6	3.85
405K		33.	5	35	TOI	inde	d p	oints		14	3.50

GENUINE SUPERIOR SWISS DRAWING INSTRUMENTS

Light Model, Perfect Head, Pivot Jointed

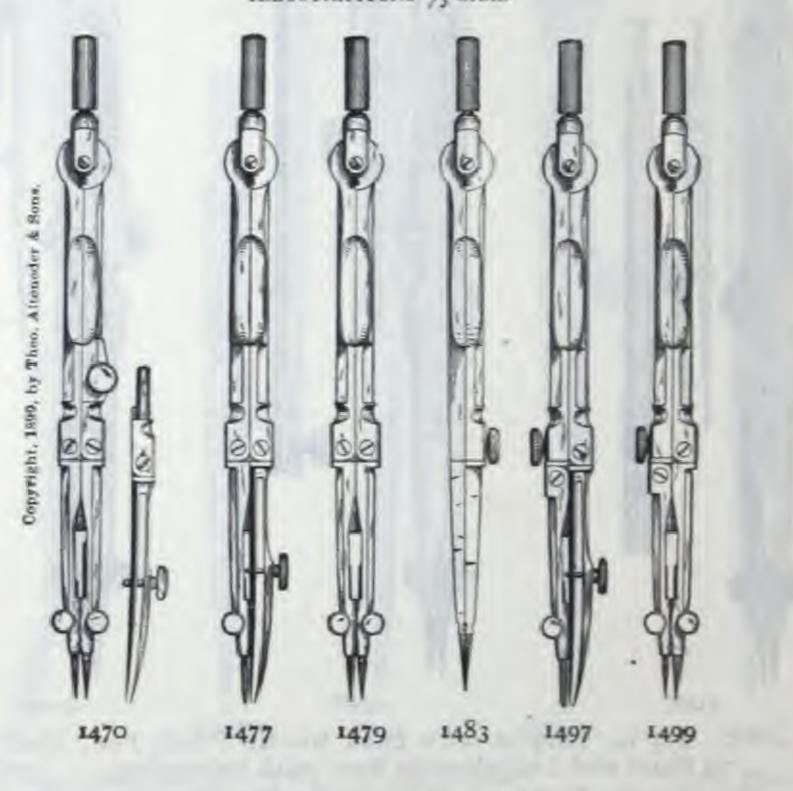


41/2 in. Divider with fixed Point and Lengthening Bar			\$6.50
51/2 in. Divider with fixed	The second second		202
Point and Lengthening Bar			7.00
51/2 in. Divider with fixed			8.00

ALTENEDER'S PATENT JOINT COMPASSES AND DIVIDERS. Small Size.

Each instrument is stamped "T. Alteneder & Sons, Pat. 1871."

ILLUSTRATIONS 3/3 SIZE.



Small Size.

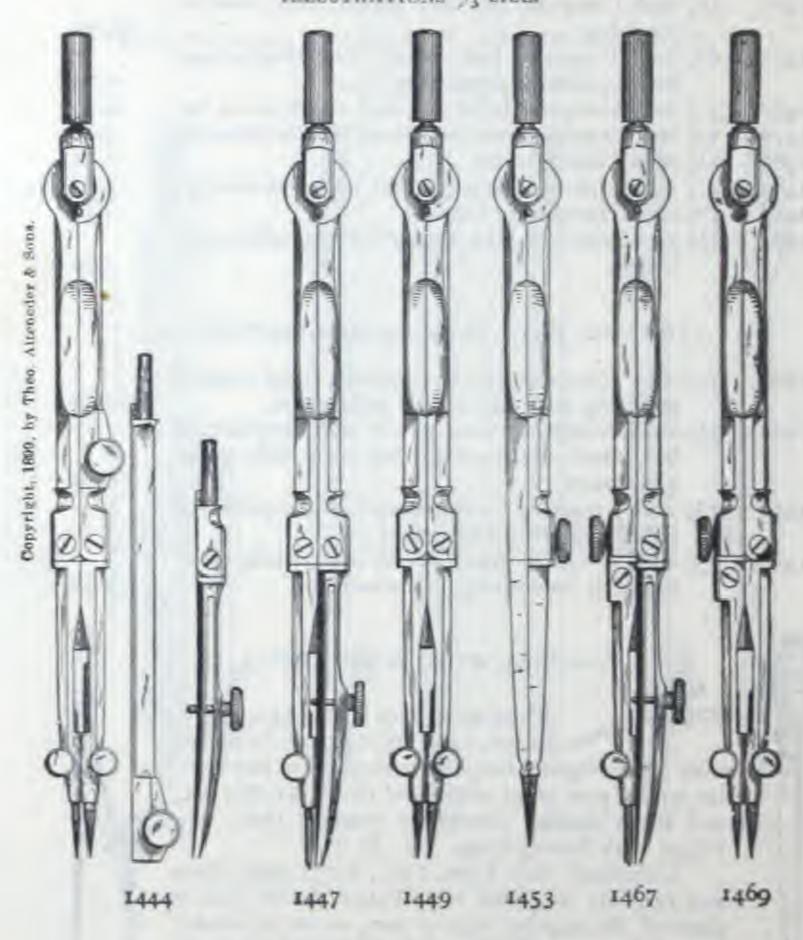
Each instrument is stamped "T Alteneder & Sons, Pat. 1871."

1470.	31/2-inch Compass, pen and pencil, fixed needle-	\$6.00
5474	31/2-inch Compass, pen, pencil and lengthening	200
1474.	bar, fixed needle-point leg	6.75
1477	31/2-inch Compass, fixed pen and needle-point leg	4.00
1479.	31/2 -inch Compass, fixed pencil and needle-point leg	4.00
1480.	21/ inch Plain Divider	2.25
1481.	31/2 inch improved Plain Divider, with joints in legs	3.25
1483.	31/2 inch Hair-spring Divider	3.50
1484.	31/2-inch improved Hair-spring Divider, with joints	
-4-7	in legs,	4.50
	8.1	
	COMPASSES WITH HAIR-SPRING ADJUSTMENT.	
1490.	3½-inch Compass, pen and pencil, fixed needle- point leg with hair-spring adjustment	87 50
1494.	31/2-inch Compass, pen, pencil and lengthening	
	bar, fixed needle-point leg with hair-spring	8.25
	adjustment . 3½-inch Compass, fixed pen and needle-point leg	,,,,,,
1497	with hair-spring adjustment	5 50
1499.	31/2-inch Compass, fixed pencil and needle-point leg with hair-spring adjustment	5 50
Rey		D
	COMPASSES WITH PATENT PENS.	6
613		10
055	Compasses Nos 1470, 1474, 1477,	11
10	1490, 1494 and 1497 are furnished	/1
13	with Patent Spring-hinge Pen, in place of the regu-	/1
1-	lar type of pen, at an additional cost of \$1.25;	
9-1	and when desired should be specified thus:	Mar -
	"1470 with Spring-hinge Pen, \$7.25." Compasses Nos. 1470, 1474, 1477, 1490, 1494	
=	and 1407 are furnished with Patent Lever Pen, in	11
17.	place of the regular type of pen, at an additional	
11	cost of \$1.00; and when desired should be speci-	1 1
y	fied thus: "1497 with Lever Pen, \$6.50."	

Intermediate Size.

Each instrument is stamped "T. Alteneder & Sons, Pat. 1871."

ILLUSTRATIONS 3/3 SIZE.



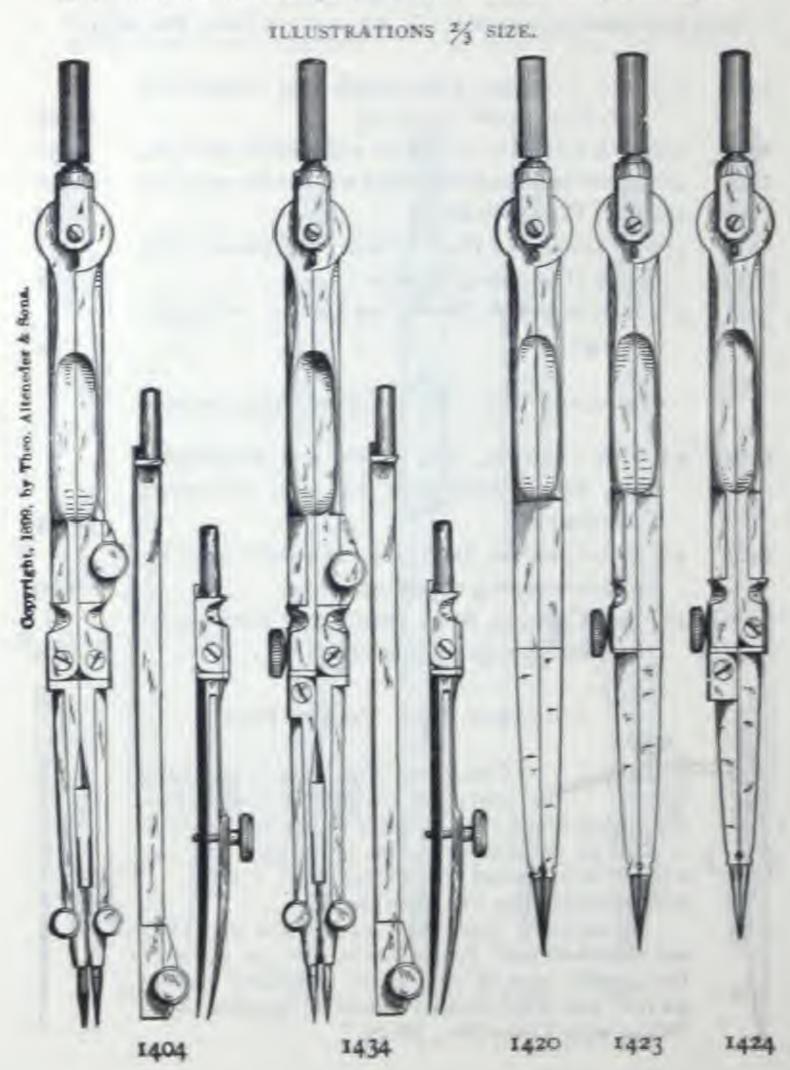
Intermediate Size.

Each instrument is stamped "T. Alteneder & Sons, Pat. 1871."

a.m.	ir mattument is aminiped.	
1444.	41/2-inch Compass, pen, pencil and lengthening	
	bar, fixed needle-point leg	\$7.25
1447.	4 1/2-inch Compass, fixed pen and needle-point leg	4.50
1449.	41/2-inch Compass, fixed pencil and needle-point leg	4.50
1450.	4½-inch Plain Divider	2.50
1451.	41/2-inch improved Plain Divider, with joints in legs	3.50
1453.	41/2-inch Hair-spring Divider	3-75
1454	41/2-inch improved Hair-spring Divider, with joints	
	in legs	4-75
	Compasses With Hair-spring Adjustment.	
1464.	43/2-inch Compass, pen, pencil and lengthening bar, fixed needle-point leg with hair-spring	
	adjustment	\$8.75
1467.	41/2-inch Compass, fixed pen and needle-point leg	
	with hair-spring adjustment	6.00
1469.	41/2-inch Compass, fixed pencil and needle-point	
	leg with hair-spring adjustment	6.00
	COMPASSES WITH PATENT PENS.	
0	Compasses Nos. 1444, 1447, 1464	77
	and 1467 are furnished with Pat-	//
13	ent Spring-hinge Pen, in place of the regular type of pen, at an additional cost of \$1.25; and	/1
4.	when desired should be specified thus: "1464	
11	with Spring-hinge Pen, \$10.00."	Mo
1.1	Compasses Nos. 1444, 1447, 1464 and 1467	H
17	are furnished with Patent Lever Pen, in place of	11
H	\$1.00; and when desired should be specified thus:	
1	"1444 with Lever Pen, \$8.25,"	1 1
1000		

Large Size.

Each instrument is stamped "T. Alteneder & Sons, Pat. 1871."



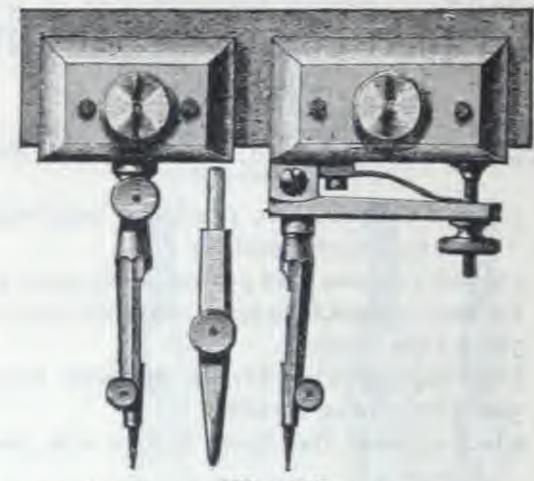
Large Size.

Each instrument is stamped "T. Alteneder & Sons, Pat. 1871."

Laci	i instrument is stamped. 1. Thresteder to botts, I at a	100
1404.	51/2-inch Compass, pen, pencil and lengthening	
	bar, fixed needle-point leg	\$7.50
1407.	51/2-inch Compass, fixed pen and needle-point leg	5.00
1409.	5 1/2-inch Compass, fixed pencil and needle-point leg	5.00
1420.	5-inch Plain Divider	2.50
1421.	5-inch improved Plain Divider, with joints in legs	3.50
1423.	5-inch Hair-spring Divider	4.00
1424.	5-inch improved Hair-spring Divider, with joints	
	in legs	5.00
	Compasses With Hair-spring Adjustment.	
1434.	51/2-inch Compass, pen, pencil and lengthening	
	bar, fixed needle-point leg with hair-spring	
	adjustment	\$9.00
1437.	51/2-inch Compass, fixed pen and needle-point leg	
	with hair-spring adjustment	6.50
1439.	51/2-inch Compass, fixed pencil and needle-point	19
	leg with hair-spring adjustment	6.50
P.	COMPASSES WITH PATENT PENS.	P
6	COMPASSES WITH LAIRNI LENS	0
0	Compasses Nos. 1404, 1407, 1434	71
	and 1437 are furnished with Pat-	- /
1300	ent Spring-hinge Pen, in place of the regular type of pen, at an additional cost of \$1.25; and	/
4.	when desired should be specified thus: "1404	
	with Spring-hinge Pen, \$8.75."	1
1-1	Compasses Nos. 1404, 1407, 1434 and 1437	#
7	are furnished with Patent Lever Pen, in place of the regular type of pen, at an additional cost of	
1	\$1.00; and when desired should be specified	1
A	those fireme with Lower Don Cto on !!	

thus: "1434 with Lever Pen, \$10.00."

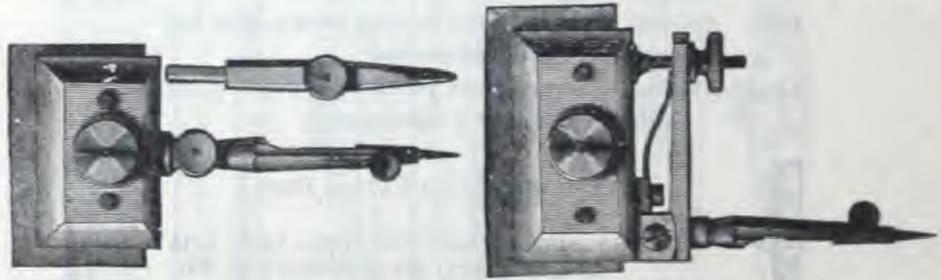
KERN & CO.'S GENUINE SUPERIOR SWISS BEAM COMPASS



NO. 180K

No. 180K. Beam Compasses, to fit on any straight edge, with 2 Needle Points, exchangeable for Lead and Pen Point, with Micrometer adjustment each, \$10.00

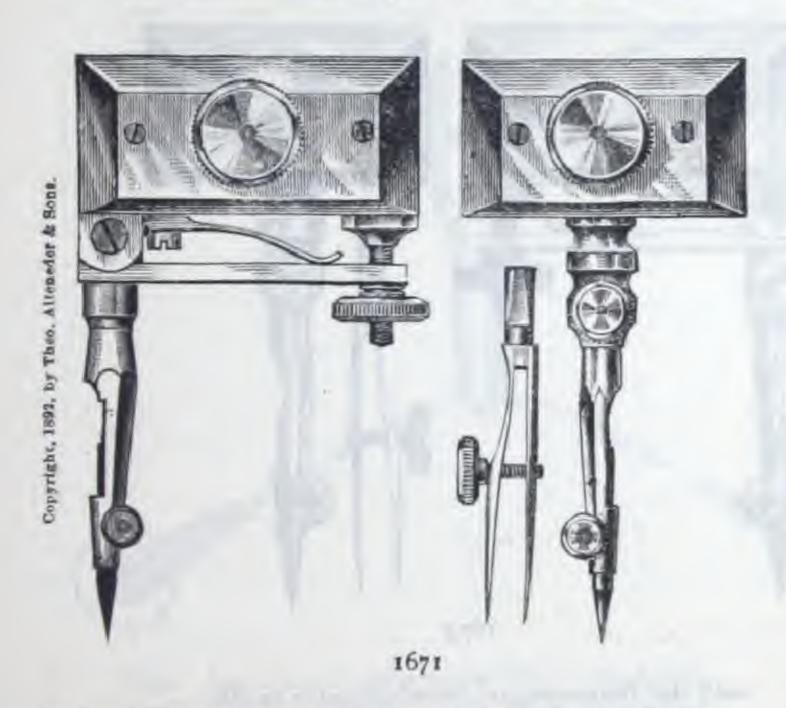
FROST & ADAMS CO'S SUPERIOR BEAM COMPASSES



13.	Beam Compass, with Needle Point, Pen and Pencil, and with Improved Micrometer Adjustment	each,	\$7.75
14.	Beam Compass, Large, with Needle Point, Pen and		
2.0	Pencil, and with Improved Micrometer Attachment .	ST.	8.75
Mon	rocco Case for same	2.4	1.00
	Beam Compass, with Adjusting Screw, Pen, Pencil and		-cea-
Au.	Needle Points	4.6	7.00
41.	Beam Compass, with Pen, Pencil and Needle Points	110	6.00
42.	Beam Compass, with Pen, Pencil and Needle Points,		
1.0	and Bar	**	8.00

ALTENEDER'S MICROMETER-ADJUSTMENT BEAM-COMPASSES.

Each instrument is stamped "T. Alteneder & Sons."



1670. Small size Beam-compass, fixed needle-point leg, with pen and pencil, micrometer-adjustment

\$7.00

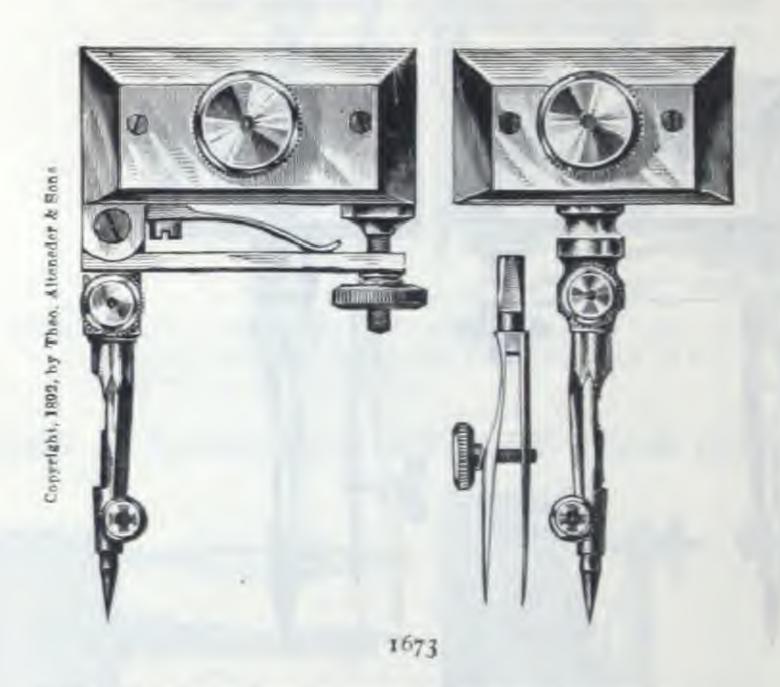
1671. Large size Beam-compass, fixed needle-point leg, with pen and pencil, micrometer-adjustment.

8.00

Nos. 1670 and 1671 are furnished with Patent Spring-hinge Pen, in place of the regular type of pen, at an additional cost of \$1.25; and when desired should be specified thus: "1670 with Spring-hinge Pen, \$8.25."

ALTENEDER'S MICROMETER-ADJUSTMENT BEAM-COMPASSES.

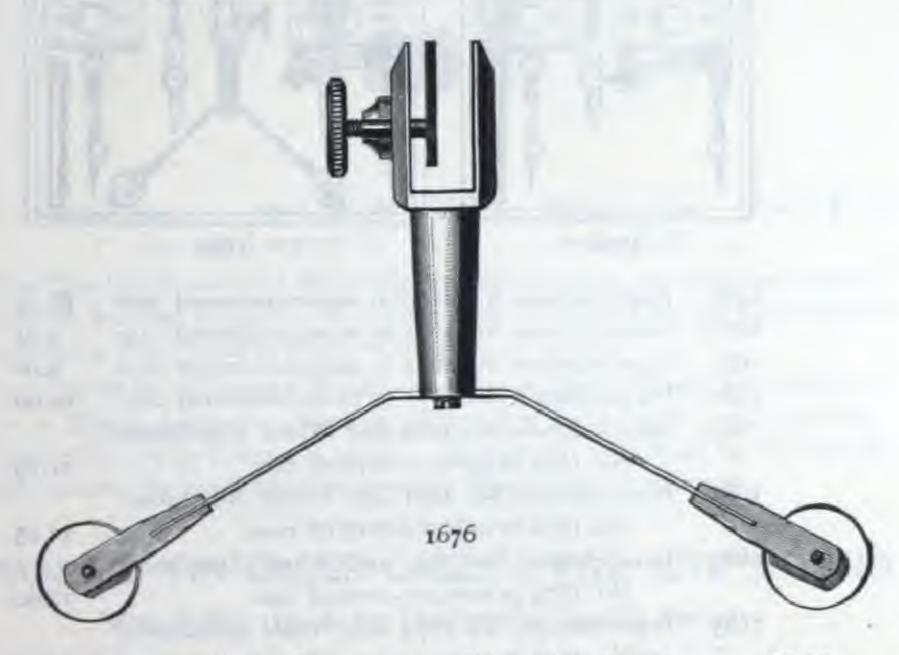
Each instrument is stamped "T. Alteneder & Sons."



- Nos. 1672 and 1673 are furnished with Patent Spring-hinge Pen, in place of the regular type of pen, at an additional cost of \$1.25; and when desired should be specified thus: "1672 with Spring-hinge Pen, \$9.00."

ALTENEDER'S BEAM-COMPASS WHEEL ATTACHMENT.

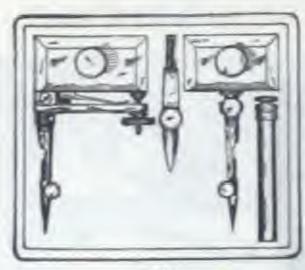
Each instrument is stamped "T. Aiteneder & Sons."

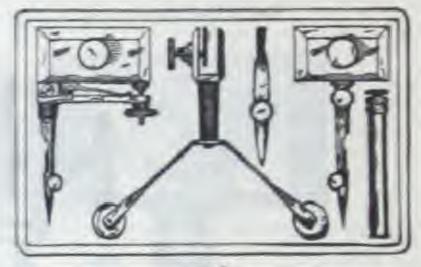


1675. Small size Beam-compass Wheel Attachment . . \$2.50
 1676. Large size Beam-compass Wheel Attachment . . . 2.50

ALTENEDER'S BEAM-COMPASSES IN MOROCCO CASES.

Each instrument is stamped "T. Alteneder & Sons."





1678

1682

1678.	Beam-compass No. 1670 in morocco-covered case	\$8.25
1679.	Beam-compass No. 1671 in morocco-covered case	9.25
1680.	Beam-compass No. 1672 in morocco-covered case	9.00
1681.	Beam-compass No. 1673 in morocco-covered case	10.00
1682.	Beam-compass No. 1670 and Wheel Attachment	
	No. 1675 in morocco-covered case	11.25
1683.	Beam-compass No. 1671 and Wheel Attachment	
	No. 1676 in morocco-covered case	12.25
1684.	Beam-compass No. 1672 and Wheel Attachment	
	No. 1675 in morocco-covered case	12.00
1685.	Beam-compass No. 1673 and Wheel Attachment	
	No. 1676 in morocco-covered case	13.00

Hard-wood Beam-compass Bars.

		12	18	24	30	36	42	48	60 inch
1689.	For small size	\$0.20	.25	.35	.40	.45			44
1690.	For large size	,20	,25	.35	,40	.45	.55	,65	.80

STANLEY IMPROVED TRAMMEL POINTS



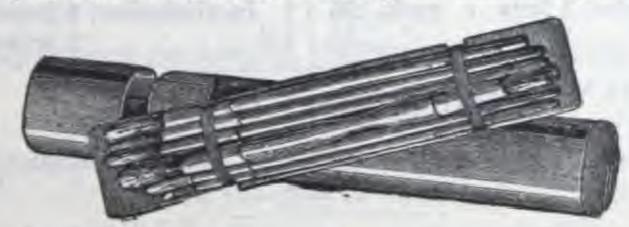
No. 1. Small size . each, \$1.00 | No. 2. Medium size each, \$1.25 No. 3. Large size . . each, \$1.75

These Tools are used by Millwrights, Machinists, Carpenters and all Mechanics having occasion to strike arcs or circles larger than can be conveniently done with ordinary Compass Dividers

They are made of Bronze Metal, and have Steel Points, on either of which a Pencil Socket (which accompanies each pair) can be firmly clamped close up to the main stock. The pencil will thus be secured at a point nearer the work than is possible by any other method

JAPANNED TIN BRUSH CASES, OVAL AND ROUND

With Rubber Bands for Holding the Brushes Secure



No. 1.	Round	. 81/2	inches	long		300		- 4				each,	, .40
2.	Oval,	10	**	11		- 11			1 .	*		11	.45
3.	Oval,	12	-11	10	4					*	4	1.5	.60
4.	Oval,	14	- 66	30	+		4		17	4.1	*	2.5	.70

Nos. 2, 3 and 4 are fitted with slide, as shown in cut

MAGNIFYING OR READING GLASSES

German Silver Rim, Ebonized Handle



1 in.	diameter	7		.45	3 1/2	4.8	diameter	7	each, .90
134 "	11		11	.50	4	**	16		" 1.75
2 11	8.6		11	.60	41/2		**	4	" 2.25
21/11	16		46	.65	0	16	44		" 3.00
21/2 "	16		4.0	.70	0		30	3	" 4.00

OVAL POCKET MAGNIFYING GLASSES

Mounted in Rubber



1 in. diameter, 1	lens .	each	.55	1 in.	diameter,	2 lenses 2 lenses	
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DIMINISHING GLASSES

and, Rough Edges each, .25

CLAUDE LORRAINE GLASSES

Black Diminishing Glasses, in Morocco Cases

4×51	nches	each,	5.75	6×7 inches	each,	\$8 00	7×8½ in.	each, \$10.00	
5×7	**	66	6.75			9.00	7×9 "	11.00	

66

1.30

2.75

.08

.18

DRAWING PAPERS, IN SHEETS

WHATMAN'S HAND-MADE PAPERS

Cap,	13×17	in	., 15	lbs.	to	rea	III	1.00	quire,	.75	sheet,	.05
Demy,	15×20	11	25	4.0		16			16	1.00	11	.05
Medium,	17×22	40	34	1.6	-	61			+3	1.60	18.6	.06
Royal,	19×24	**	44	16	9	13	Q.	16	48	2 00	6.6	.07
Super Royal,	19×27	13	52	1.4					146	2.50	ec.	.10
Imperial,	22×30		72	1.6	- 1			,	- 11	3.00	36	.13
Imperial,	22 × 30	11	90	4.6					10	5.00	**	.20
Imperial,	22×30	14	140	X1.	-7		4	4	+4	7.50	11	.30
Imperial,	22×30	64	200	6.6	-				**	11.00	1.6	.60
Imperial,	22×30	45	300	6.0	- 1				11.	20.00	111	1.25
Double Elephant,	27×40	18.5	133	147		11			1.6	5.75	3.5	.25
Double Elephant,		* 2	210	+ 6		1.6			4.6	12.00	11	.50
Antiquarian,	32 × 52		240	**				11	41	30.00	44	1.50
			615 05		2.23	-						

These papers are made with three different styles of surface:

HP. signifies "Hot Pressed," has a smooth surface; mostly used for pencil and very fine lin -drawings

CP. signifies "Not Hot Pressed," has a finely grained surface; used

for general purposes and water-color drawing
R. signifies "Rough" (Torchon Paper), has a coarsely grained surface;
used for very bold drawing and sketching

Special prices by the ream

22

Imperial,

Double Elephant, 27

 $\times 30$

 $\times 40$

FROST & ADAMS CO.'S

EMPIRE DRAWING PAPER FOR WATER COLORS

The Successful Rival of Whatman's Paper

Royal,	19×24 in.			 quire,	\$1.60	sheet,	.08
Super Royal,	19×27 "	4		2 46	1.80	14	.10
Imperial.	22 × 30 **			16	2.50	10	.12
Double Elephant,	27×40 "			1.6	4.25	1.6	.20
	The second second second second			 		-	-

Made Hot Pressed, "HP." or smooth surface, and Cold Pressed, "CP." or fine grained surface

I. D. HARDING'S DRAWING PAPERS FOR WATER COLORS

Imperial,	22×30 in.,	thin			quire \$3.00	sheet,	.13
Imperial,	22 × 30 **	extra	thick		6.00	- (6	.25

UNIVERSAL DRAWING PAPERS, HARD FINISHED SURFACE

For Penciling or Drafting quire, .40 sheet, .05 $\times 17$ in. Cap, 15½×19½ " .50 .05 Demy, .60 .06 × 22 17 Medium, .84 .08 $\times 24$ 19 Royal, .08 11 1.00 ×27 Super Royal, 19

Drawing Papers in Sheets-continued

ENGLISH METALLIC PAPER

Royal, 17×23 in. . . . quire, \$2.00 sheet, .10
Unexcelled for Pencil Sketching and Shading

Samples furnished on application

ECLIPSE, OR AMERICAN COLD PRESSED DRAWING PAPERS

Medium,	$17\!\times\!22$	in.		*			quire,	.35	sheet,	.02
Royal,	19×24	14	*	ν.		4	- 44	.75	64	.03
Imperial,	22×30	16		4	- 2		4.6	1.00	66	.04
Double Elephant,	27×40	A.K					F.6.	2.25	64	.10

NORMAL DRAWING PAPERS

Royal,	19×24 in.	4	4	1	quire,	\$1.65	sheet,	.08
Imperial,	22×30 "			14	- 66	2 35	41	.10
Double Elephant,	27×40 "				4.6	3.60	**	.15

A paper of Superior Quality for Ink or Pencil

DUPLEX DRAWING PAPERS

Royal,	19×24	in.,	Cream	Color			quire,	\$1.10	sheet,	.05
Imperial,	22 X 30	11	11		*		- 11	1.60	21	.07
Double Elephant,	27×40	14	4.1			4	84	2.60	- 11	.12
Double Elephant,	27×40	3.6	Drab C	color	4		11	3.10	- 61	.15

ENGLISH PRIME PARCHMENT, IN SHEETS

Genuine Sheepskin

Size	12×16	in.			sheet,	.40	Size	16×22	in.	-	shee	t, .85
10	13×17	KK		-	41	,50	11	17 × 22	11		61	.90
EE	14×17	- EE			11	.55	11	18×24	11		-	.95
16	14×18	41	100		40	.60	110	19×25	EE.	-	64	1.00
66	15×20	46			4.6	.65	16	20×24	66.		5.1	1.05
116	15×21	18		4	4.6	.70	EE	22 × 26	**		2.2	1.10
66	16×20	EE			4.6	.75	10	24×28	. 44		4.6	1.40

STRATHMORE WATER COLOR AND DRAWING PAPERS

No. 945.	Smooth	Surface,	22×31	in	. 72	1bs	to rm.	rm.,	\$43.20	gr.,	\$2.50
946.	Medium	66	22×31		72	3.5	11	0.0	43.20	34	2.50
947.	Smooth	11	27×40	18	133	4.5	46	1.4	79.80	16	4.75
948.	Medium	72	27×40	- 11	133	1.1	46	41	79.80	11	4.75

Samples furnished on application

Drawing Paper in Sheets-continued

COOL	TET T	77	DA	DED
COOL	اللال	E	PA	PEK

In sheets 23 × 29 inches per doz., \$2.00 sheet	n sheets 23 × 29 inches						per doz.,	\$2.00	sheet.		1	Ċ	
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This paper, sometimes called board, has a finely stippled surface, and is especially adapted for water color or free-hand charcoal

WESTON'S IMPERIAL LINEN RECORD PAPER

For Pen and Ink Drawing

Imperial,	22×30 inches	4	-	quire,	\$2.50	sheet,	.10	
Double Elephant,	. 27×40 "	-		10	4.00	16	.20	

BROWN'S LINEN RECORD PAPER

For Pen and Ink Drawing

Imperial,	22 × 30 inches	141		. ,	quire,	\$2.50	sheet,	.10
Double Elephant,	, 27×40 "		*		110	4.00	11	.20

BLOTTING PAPER

White, 19×24	qr., \$1.00 she	eet, .05 Pink	, 19×24	gr., \$1.00	sheet, .05
Blue, "		.05 Gray			.05

GOLD AND SILVER PAPERS

Gold,	Cap	4.				13	×	131/2	in.		quire,	.75	sheet,	.04
11	Lion, II			4	AL.	151/2	×	181/2	44		44	1.50	6.6	.08
- 65	Coquille,	W	. II		+	171/2	×	22	66	,		3.00	- 64	.15
66			, ½ fin			171/2	×	22	66		4.6	5.00		.25
100	7.6		fine, b		shed	171/2	X	22	44		4.6	6.00	.00	.30
44			fine, d			171/2	×	22	16		44	6.00		.30
16	Genuine,			_		10%	X	17	15		- 46 1	6.50	2.5	.75
11	Embossed								11		1.6	1.50	- 66	.08
46			quille,								4.6	3.50	- 11	.20
Silver	, Cap .		*					131/2			- 51	.75	11	.04
16	Lion					151/2	×	181/2	11		6.6	1.50	11	.08
**	½ fine					171/2		100	44-		16	2.50	64	.12
- 10	Genuine					173/2			48		4.6	6.75	66	.35
116	Embosse		Lion					181/2	-14		186	1.50	11	.08
	**		½ fine			171/2			14		8.5	3.50	**	.20
							_							

COPPER FOIL OR TINSEL

White	100	sheets,	\$4.00	sheet.	.05	Magenta 1	00 sheet,	\$4.50	sheet,	.05
Brown	335	11	4.50	11	.05	Orange	(1)	4.50	11	.05
Blue		11	4.50		.05	Red	1.00	4.59	14	.05
Crimson		11	4.50	11	.05	Ruby	12	4.50	11	.05
Fire		11	4.50	10	.05	Solferino	11.	4.50	-(6	.05
Green, Li	ight	11	4.50	- 11	.05	Scarlet	40	4.50	11	.05
	eep	40	4.50	46	.05	Violet	0	4.50	31	.05
Gold		11	4.50	- 11	,05	10000000		-		

Drawing Papers in Sheets-continued

ENGLISH TINTED CRAYON PAPERS

Imperial,	22×30 in., 20 tin	ts .	*	quire,	\$2.50	sheet,	.12
Double Elephant,	26×40 " 6 "		191 1	14	4.50		,20
Imperial,	22×30 " Hand	Made		66	6.00		.25

FRENCH CHARCOAL PAPERS

Ordinary,	Royal,	19 × 25 in.,	13 tints and	white,	M.B.M.	quire,	.75	sheet,	.05
Michalet.	16	11	12	15		11	1.00	91	.06
Lalanne,	6.6	11	White			13.	1.00	16	.06
Allonge,	11	46	White an	id Ci	ream	11	1.75	4.6	.08
Strathmore	14	11	White			116	.75	11.	.05
Coquelin,	ix	-11	White			10	2.00	44	.10

Sample Book of Charcoal Papers on application

FRENCH PASTEL PAPERS

Royal .	19×25 in.					quire,	\$5.00	sheet,	.20
Super Royal	22×28 "		4	2	1.0	1.5	6.00	116	.25
Colombier	24×34 "		2			66	10.00	46	.50
Grand Aigle	26×40 44	5.		-		11	14.00	(£	.60

FRENCH PASTEL BOARDS

No.	6.	13×16	in.	dor.,	\$4.50	sheet,	.40	No. 12.	20×24	in.	dez.,	\$7.00	sheet	, .60
	8.	15×18	11	44	5.00	9.6	.45	15.	21×26	TE	44	7.50	AF	.65
	10.	18×22	4.6	6.5	6.00	156	.50	20.	23×29	18	5,0	9.00	14.	.75

FROST & ADAM'S CO.'S PASTEL BOARDS

Superior Quality, 22 × 28 in. . . . doz., \$4.20 sheet, .40

Six Finishes: No. 1, White, fine grain; No. 2, Light Cream, medium grain; No. 3, Light Cream, coarse grain; No. 4, Cool Gray, velvet finish; No. 5, Buff, medium grain; No. 6, Buff, coarse grain

JAPANESE WATER COLOR PAPERS

No. 1.	Thin,	10%	×15½	in.	-	ream,	\$8.00	doz.,	.20	sheet,	.02
2.	Medium,	12	×173/2	16		44	8.00	KE.	.20	1.6	.02
3.	Thick,	12	×161/2	11		XX.	8.00	9.6	.25	. 86	.02

ENGLISH CARBON TRANSFER PAPERS

Extra Quality

11×18 in. [Blue, Black, Green, Red, Yellow,	doz., .30 sheet, .05
18×22 " 1	Purple and White	5 " .60 ,, ,10

ROSS' RELIEF HAND STIPPLE DRAWING PAPERS



- 14.3								
Size 11 × 14 in. sheet, .30 Size 14 × 22 in.	sheet,	.50	Size	22	× 28 i	11. 8	heet, .	75
No.1. Embossed fine stipple			11×	14	14×	22	22×	28
11/2. " medium "		71/1	11×	14				
2. " " "			11×		14×	22	22×	28
8. " coarse and fine stipple			11×	0.00	14×		22×	
4A. " square cross line .			11×		14×	22		-
4B. Black over embossed square line			11×		14×			
5. Embossed grain			0		14×			
6. Embossed basket pattern .					14×		1.4	
6B. Embossed basket pattern, printed					14×			
7. Black ruling printed on steel					14×			
8. Embossed very fine stipple .			11×	14	-			
9. Very fine stipple	100		11×				-	
10. Black line one way and embossed	acro	25	****	1.1	14×	22		
11. Embossed cross lines	acro	313	11×	14	14×			
11B. " fine .			11.	11	14×			
7,000		*			14×		*	
	FORE		ii×	14	IT.			
12. Fine black line one way, emb. acr	1055		11×		14×	99		
13. Crayon and stipple	*		110	1.4	14×			
14. Printed crayon tint	1 1:00				14×			
15. Printed crayon tint and embossed	1 1111		1114	11	14.			
16. Embossed diamond stipple .			11×			*	4	
17. Very fine printed lines	*	*	11×		*	*	100	
18. Embossed lines	*		11×		*			
19. Very fine printed cross lines			11×					1
20. Very fine printed cross lines			11×	14	114	20		
21. Very fine black lines one way, em					14×:		. *	
22. Printed lines and crayon .					14×	22		
23. Printed dotted lines			11×		*			
24. Black line one way embossed stip	ple	*	11×					*
25. Printed cross hatch	*				14×			
27. Embossed very fine stipple .			21		14×			
29. Printed lines and crayon .		4			14×	20.50		
31. Printed diag. lines and fine stipple	е		× .		14×		4	*
37. Printed lines and crayon .					14×			
38. Printed fantastic hatch .					14×			
By rubbing crayon over surface of pap	er ti	he pi	cture	e is	form	ed'	n sti	P-
ple, in light and shade, at will. High ligh	ghts	are 1	nade	by	erasi	are		
C	-							

TRACING PAPERS IN SHEETS FRENCH VEGETABLE TRACING PAPERS

Telliere,	13×17 in., E	xtra Fine			quir	e, .75	sheet	, .05
Ecu,	15×20 "	11		121	**	1.25	12	.10
Grand Raisin,	19×25 **	11			410	2.00	16	.15
Jesus,	22×28 **	4.6	4		17	2.50	115	.20
Grand Aigle,	26×40 **	11			110	9.00	it	.40

ENGLISH AND FRENCH TRACING PAPERS

No. 1.	Rowney's,	20×30	in.	400		939		quire,	\$1.35	sheet,	.10
8.	ž1	20×30	45	-	4		4	9.6	1.00	316	.05
9.	- 11	19×24	11	gelatine	or	glass	finish	10	2.50	tt	.15
240P.	French,	20×30	15		*			6.0	1.35	3.6	.10

CRANE & CO.'S BOND TRACING PAPERS

No. 16.	Crane's,	19×30 în	., Bond			*	quire,	\$1.25	sheet,	.06
21.	82	19×30 "	- 60		4	4	10	1.35	4	.07
25.	44	19×30 **	.66				12	1.50	ti.	.08
29.	44	19×30 "	-64	i.	4		44	1.80	116	.09
16.	- 11	21 × 33 **	44	4	10	3	16	1.35	14.	.07
21.	86	21×33 "	311		4	4	100	1.50	15	.08
25.		21×33 "	11.	14	4	4	11	2.00	- te	.10
29.	4.6	21×33 "	44		4.		XX.	2.25	1 i	.12
16.	3.6	27×40 "	- 11				9.6	2.50	11.	.15
21.	10	27×40 **	14				64	2.75	16	.15
25.	44	27×40 "	110				10	3.00	10	.15
29.	- 11	27×40 "	**				ii	3.50	44	.15
10.	44	21×31 "	Flaxing	9			i.e.	3.00	i ki	.15
10.	0.	21×31 "	Old Sty	yle	4	2 -1	11	3.00	11	.15
	V C	17×22 "	Onion S	Skin		4	4.6	.75	66	.05

Samples furnished on application

TRACING PAPERS, CONTINUOUS

FROST & ADAMS CO.'S TRACING AND BOND PAPERS



0.	1.	Rowney's English	, Thin V	Vhite			40	in.	20 y	d. roll,	\$2.50
	11.	Bowdoin, Thin, W	hite, ver	y trai	is. u	npre.	54	4.1	22	3.6	2.30
	2.	Bowdoin, Thin, W	hite,	14		11	54	63.	44	16	4.60
		Pemberton, Thin,		26			42	11	20	3.6	1.50
	4.	Park, Transparent		ing Pa	per		36	2.5	50	16	2.00
	5.	Rowney's English	, Thin, 1	Blue (Glaze	d	40	4.8	20	11	2.50
		Park, Transparent	Sketch	ing Pa	per		60	4.8	50	94	3.25
	6.	Rowney's English				ed	40	11.	20	1.6	3.00
		Beacon, Medium T					42		20	6.6	2.00
	7.	Buff Tint .					48		22	9.6	1.00
	8.	Buff Tint .					48		44	6.0	2.00
	47.	Economy, Trans.	Sketchin	no Par	per		36		50	11	2.00
	47.	16 61	**	0 11			60		50	41	3.25
		Vellum, Bond, Du	Il Finis	h. ver	v ton	igh	42		20	14	1.35
		Vellum, Medium		.,	,	- B	39		20	4.6	3.60
		Parchment, Medi		tong	h. un	pre.	37	13.	20	44	3.50
	191.	Parchment, Thick	-	-			37	66	20	3.6	4.30
	192.	Abacus, very Thin			- P		42	26	10	14.0	2.75
	194.	Patera, Stout, ver			achi	nists			20	1.6	3.75
		Colonna, Medium					30		20	14	2.60
	195M	Committee of the Commit	11		Con.		36		20	14	3.20
	195M		4.6				42		20	16	3.80
	195T.	" Thin	- 2				30	66	20	18	2.25
	195T.	11 11					36	46	20		2.75
	195T.	12 11				-	42	16	20	. 14	3,25
		Vellum, beyond o	omparis	on		-	36		20	44	4 00
	196F.	11 15	41				42		20	14	5.00
	196.	Corinthian, very	tough a	nd tr	ans	well	1		-0		0.00
		dapted for photo-p					39	11	20	66	3 20
	198.	Gothic, very toug		anspa	rent		42	24.	20	14	3.40
	200.	Doric, Medium T		arr. pa	CHL		42	61	20	14	2.60
	202.	Alba, for transfer		renare	h		54	61	44	114	4.60
	202.	is ii	ing, dup	16			54		22	114	2.30
	204.	Lotus, Thin, toug	h and tr	ans	Inne		42		20	100	1.50
		Libra, Med. Thick					42		20	9.4	2.00
	206.	Electric, natural,			unp	10.	56		44	14	4.50
	1805.	it it	cold pre	Jak (I			56		22	100	2.25
	4806.	Banknote, Trans.	White	-			36		20	4.6	1.65
	8000.			-			00		e3/		1.00
S	ample	s furnished on app	plication								
-	F 4 10 10	75 J Mrs. 40075	a matted	mar - 61	Jan al	L. Chicagonia	140		HAT PER	A cream	Serve V

No. 195F and No. 196F are rolled on a 2-inch core (to prevent curling), then placed in a substantial cardboard tube fitted with a cap. Write for special descriptive circular

TRANSPARENT TRACING PAPERS

36 in. wide	1.2							-	per 20 y	ard roll	\$2.00
42 "										14.	2.25
42		**	*	•	*	*		10			2.40
No. 30. Fro									Paper, s	strong,	tough
36 in. wide									per 50 y	ard rol	1, \$2.30
62 "						4	*		11.	.01	3.40
No. 47L. E	conor	my T	rans	parer	it Sk	etchi	ing F	aper	, white, li	ight we	ight
36 in. wide		4							per 50 y	ard rol	1, \$1.75
42 "	-				+		4		11	16	2.25
60 "		4	+	4					-64	11 -	2.90
No. 47. Eco	nomy	Tra	nena	ront (Chata	1.5					
	40,000		пэра	Cur	skett	ning	Pap	er, w	hite, med	ium	
36 in. wide									per 50 y		1, \$2.00
									per 50 y		1, \$ 2.00
36 in, wide					*				per 50 y	ard rol	
36 in, wide					*				per 50 y	ard rol	2.50
36 in. wide 42 " 60 "		* * *							per 50 y	ard rol	2.50
36 in. wide 42 " 60 "	cono	my T	rans	pare	nt Di	awir	ig Pa	per,	per 50 y	ard rol	2.50 3.25
36 in. wide 42 " 60 " No. 47H. E	cono	my T	rans	pare	nt Di	awir	g Pa	per,	per 50 y	ard rol	2.50 3.25
36 in. wide 42 " 60 " No. 47H. E 36 in. wide	cono	my T	rans	pare	nt Di	awir	g Pa	per,	per 50 y	ard rol	2.50 3.25
36 in. wide 42 " 60 " No. 47H. E 36 in. wide 42 "	cono	my T	rans	pare	nt Di	awir	g Pa	per,	per 50 y	ard rol	2.50 3.25 1, \$1.50 1.80
36 in. wide 42 '' 60 '' No. 47H. E 36 in. wide 42 '' 60 ''	cono	my T	rans	pare	nt Di	awir	g Pa	per,	per 50 y	ard rol	2.50 3.25 1, \$1.50 1.80 2.50

IMPERIAL TRACING OR VELLUM CLOTH

Glazed on One Side and Dull on the Other





1	Imperial,	18	in. wide		24 y	d. roll,	\$4.50	yd.,	.25
	ec.	30	16	4	24	**	7.55	**	.35
	11.	36	a		24	11	8.40	44	.45
	44	41	31		24	66	11.30	14.6	.55
	66.	48	110		24	11	14.95	11	.75
	144	54	. 44		24	**	15 90	81	.80

DOWSE'S TRACING OR VELLUM CLOTH

Glazed on One Side and Dull on the Other

Dowse's,	18 is	ı. wide	24 y	d. roll	\$3.80	yd.,	.25
11	30	44	24	***	6.10	11	.35
44	36	44	24	* (7.00	4.6	.40
14	41	11	24	*1	9.20	1.0	.45

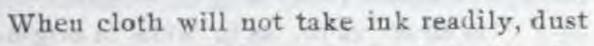
VELLUM TRACING CLOTH DOWSES PATENT

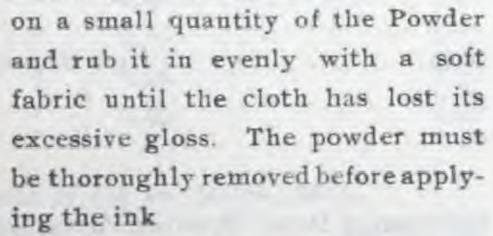
Samples sent on application

TRACING CLOTH POWDER

Powder for Tracing Cloth, in tin shakers

each, .15







FROST & ADAMS CO.'S

MANILA DETAIL PAPERS, CONTINUOUS

n .		Con		2	-alls of a	hout I	on the	a in	19 in	
					rolls of a					15 10
48	111.,	4 111.	wid	e .				* *	per	lb., .10
The	Smoo	oth M	Ianil	a pa	pers, inter	nded m	ainly for	stencil	s and pa	tterns,
				-	prelimina					
					ction, we					
-					rawing, ar					-
then s	- IMB					25 25 25				
No.6 .	Cli	max	. ligh	ht w	eight, in	rolls o	f about 1	00 to 1	25 lbs.	
	in 8	6 in.	, 42 i	n., 4	8 in. wide	, in orig	ginal roll	s .	per	1b., .15
36 in.			2.1		per 50 y	ard rol	1, \$1.80 p	er 100	yard rol	1, \$3.25
42 11					21		2.00	115	16	3 75
48 "					i.e		2.20	2.2	36	4.15
No. 80.	Cli	max	, me	dium	weight, i	n rolls	of about	100 to 1	25 lbs.	
	in 8	6 in.	, 42 i	n., 4	8 in. wide	, in ori	ginal roll	s -	per	lb., .15
36 in.					per 50 y	ard rol	1, \$2.25 p	er 100	yard rol	1, \$4.00
42 "					u			11	10	4.35
					199			19	11	4.70
No. 10	o. C	lima	x, he	avy	weight, in	rolls o	f about 1	00 to 1	25 lbs.	
	in S	86 in.	, 42	in., 4	8 in. wide	, in ori	ginal roll	9 .	per	1b., .15
36 in.					per 50 y	ard rol	1, \$2.75 p	er 100	yard rol	1, \$5.00
					in		2.90	16	11	5.75
					10		3.65	14	ri-	6.75

Strathmore Detail Drawing Paper, Buff Tint, in rolls of about 30 to 45 lbs., 30 in., 36 in , 42 in., 48 in. wide . . . per lb., .30

Manila Detail Papers, Continuous - continued

100	lbs.	, 36 i	n., 4) in.,	48 in., 54	in. wi	de .	*	per	1b., .12
No. 600	3.G.	Ro	ugh :	Manil	a, light w	eight,	in rolls o	f about	125 to	
150	lbs.	, 36 i	n., 4	0 in.,	42 in., 48	in. wi	de, in orig	ginal rol	ls per	lb., .15
36 in.					per 50 y	ard ro	11, \$1.80 p	er 100 y	ard rol	1, \$3.25
10 "					44		2.00	. 10	**	3.75
12 10					64	4.5	2.20	15	4.4	4.15
18 **					-64	11	2.50	11	. 66	4.60
No. 800	3.G.	Ro	ugh	Mani	la, mediu	ım we	ight, in r	olls of	about	
							, 48 in.,			
										lb., .15
36 in.			10	4	per 50 y	ard ro	11, \$2.25 p	er 100 y	ard rol	1, \$4.00
40 "				21	11	61	2.45	11	4.6	4.35
12 11					-66	4.6	2.60	CF.	4.6	4.70
48 "					14 -	16	2.95	er	60	5.35
54 "		4			18	11	3.25	44	41	6.00
No. 10	G G	. R	ough	Mar	ila, heav	y wei	ight, in r	olls of	about	
				36 in	., 40 in.,	42 in.	, 48 in.,	54 in. w		
ori	gina	l roll	s .						per	1b., .15
36 in.	1		11		per 50 v	ard ro	11, \$2.75 p	er 100 y	ard rol	1, \$5.00
40 "					**	44	2.90	**	44	5.25
42 "				27	***	11	3.10	rr.	66	5.75
48 11	1				**	**	3.65	11	56	6.75
54 "					***	**	4.00	**	**	7.50
	30 m. 1 km	-	4 69 6		NA	-11	f 125 to 1	50 1ha	2a in	

Manila Detail Papers, Continuous - continued

No. 60	. Ri	bbed	Ma	nila,	light wei	ght,	in rolls o	f about	125 to	
150) 1bs.	, 36 i	in., 4) in.,	42 in., 48	in., 5	4 in. wid	e, in or	iginal	
ro	lls .				4 +				per	1b., .15
36 iu.			127	*	per 50 y:	ard ro	11, \$1.80 p	er 100 y	ard rol	1, \$3.25
40 "			*		4.6	18	2.00	31.	60	3.75
42 "	*				44	4.5	2.20		11	4.15
48 "	+				66	11	2.50	1.6	(it	4.60
54 ''					"	**	2.95	1.2	- (4	5.25
							in rolls o			
150	lbs.	, 36 i	in., 40	0 in.,	42 in., 48	in., 5	4 in. wid	e, in or	iginal	
rol	lls			-	4 11 31	*	(5 - C)		per	lb., .15
36 in.					per 50 ya	ard ro	11, \$2.25 p	er 100 y	ard roll	1, \$4.00
40 11							2.45			4.35
42 "		4			11	4.0	2.60	44	110	4.70
48 "					- 11	14	2.95	14.	- 11	5.35
54 "					11.	ii	3.25	41	11	6.00
No. 10). R	ibbe	d Ma	nila,	heavy we	ight,	in rolls o	f about	125 to	
150	1bs.	, 36 i	in., 40) in.,	42 in., 48	in., 5	4 in. wid	e, in or	iginal	
rol	ls			.4.			* *		per	lb., .15
36 in.	4				per 50 ya	rd ro	11, \$2.75 p	er 100 v	ard roll	\$5.00
40 "					- 11	1.66	2.90	11	**	5.25
42 "	**	*		-	***	10	3.10	44	ei.	5.75
48 "					10	46	3.65	11	iki.	6.75
54 "				1	**	46.	4.00	44	14	7.50
				1,01						1.00

No. 110. Ribbed Manila, in rolls of about 125 to 150 lbs., 36 in., 40 in., 42 in., 48 in., 54 in. wide, in original rolls . per lb., .15

Manila Detail Papers, Continuous - continued

No. 60.	Cobbo	ossee,	light	weight, in	rolls	of about	100 to 1	25 lbs.	
36	in., 40 i	n., 42 i	in., 48	in. wide,	in orig	ginal rol	ls .	per l	b., .15
							0470		
36 in.	* 100			per 50 y	ard roll	1, \$1.80 p	er 100 y	yard roll	, \$3.25
40 **	. 4		4		44	2.00	11	24	3.75
42 "	41 2			-01	66	2.20	11		4.15
48 **				mall or	"	2.50	44	46	4.60
No. 80	Cobb	ossee,	medi	um weigh	t, in ro	lls of abo	ut 100	to 125	
				n., 48 in.,					в., .15
	., 00 14	hae to	7		***************************************				
36 in.				per 50 y	ard rol	1, \$2.25 1	per 100	yard roll	\$4.00
40 "				**	11	2.45	15	44	4.35
42 "				- 11	it	2.60	- 11	66	4.70
48 "				**	16	2.95	44		5.35
							(e)		
No. 10	0. Cob	bossee	, hear	y weight,	in roll	s of abou	t 100 to	125 lbs.	
				8 in. wide					lb., .15
		in the same			DANK				
36 in.				рет 50 у	ard rol	1, \$2.75	per 100	yard rol	1, \$5.00
40 "		11.7	1 12		14	2.90	11	191	5.25
42 "	12 (1 10	3 15		16.	14	3.10	14	71.	5.75
48 "		111		16	-14	3.65	air	11	6.75
40		CONT IN	*			0,00			7.44

Samples of Detail Papers furnished on applications

DRAWING PAPERS, CONTINUOUS

UNIVERSAL. MEDIUM

				UNIVI	ERSAL.	ME	DIUM		
36	inch,	rolls	weighing	30 to 40) pounds		1 40		per pound, .4
16	44	66	46	**	- 11				per 10 yard roll, 1.7
86	46	XI	16	111	.66				per yard .2
2	60	44	-11	16	4.5				per pound, .4
2	11.	8.6	46	4.6	- 6			4	per 10 yard roll, 2.0
2	14	11	116	44	112				per yard, .2
6	.64	46.	66	44	44				per pound, .4
6	.64	44	vi.	44	211				per 10 yard roll, 3.0
6	10	X C	11	4.0	15.6				per yard, .3
2	46	16	44	41	4.7				per pound, .4
2	15	44	116	187	14.1				per 10 yard roll, 3.4
12	10	11	4.6	1.1	100				per yard, .4
-			DITE	v M	EDIUM,	CPE	ANA	0	
							TUTAL A	-	
30	inch,	rolls	weighing :	30 to 40	pounds	*		,	per pound, .2
0	14	11	11	4.1	- 11		1.2		per 10 yard roll, 1.1
0.	4.4	4.4	91	4.5	- 15	15		8	per yard, .1
6	4.6	1.5	18	41	24		9	*	per pound, .2
6	16	11	- 55	11	1.5	(4)		4	per 10 yard roll, 1.3
16	4.6	4.9	11	- 11	34	4			per yard, .1
2	4.6	4.4	3.0	166	16		2		per pound, .2
12	4.6	11	11	4.6	16			,	per 10 yard roll, 1.7
12	3.6	44	11	1.1	- 11			4	per yard, .2
56	58	11	44	16	14		4		per pound, .2
6	-66	4.8	54	11	14				per 10 yard roll, 2.1
6			110	11	9.8				per yard, .2
32	1.0	4.6	41	4.6	(te				per pound, .2
32	6.6	2.5	44	-61			-	4	per 10 yard roll, 2.5
32	35	16	44.	24	1.0	4			per yard, .3
			DUPI	EX.	THICK,	DR	AB CO	DL	OR
26	inch	rolls	weighing						per pound, .2
36	11	10115	Weigning.	11	Position				per 10 yard roll, 1.6
36	16	16	4.6	10	44	Ö			per yard, .1
56	10	ii		111	1.0		*		per pound, .2
			41	11	- 740	-	*	19	per 10 yard roll, 2.6
6	14	11	66	44	**	*	- 1		per yard, .3
6					LEONIII	ATE			per yara,
					LEONII				
	inch,	rolls	weighing	30 to 4	0 pounds		- 5		per pound, .4
36	A.C.	**	-10	**	**	4		*	per 10 yard roll, 2.1
	4.5	4		11	- 44				per yard,
	4.4	11	44	3.6	**	*	-		per pound, .4
36 42	100		11	CC.	**	+			per 10 yard roll, 2.6
36 42 42	44	110							per yard, .3
36 42 42 42	44.	11	(1	22		141	191		
36 42 42 42 62	40	11	"	10	- 66	*	1		per pound, .4
36 42	40	11	"						

Drawing Papers, Continuous-continued PARAGON . per pound, 58 inch, rolls weighing 30 to 40 pounds . . per 10 yard roll, 4.00 58 " 58 " . . per yard, 6.6 PARAGON. MEDIUM, ROUGH 36 inch, rolls weighing 30 to 40 pounds . . . per pound, . . per 10 yard roll, 3.00 36 " . . per yard, 36 per pound, .50 per 10 yard roll, 3.50 per yard, .38 per pound, .50 per pound, .50 per pound, .50 per pound, .50 per 10 yard roll, 4.50 42 58 58 " " " " . per yard, EGGSHELL. ROUGH 36 inch, rolls weighing 30 to 40 pounds . . . per pound, per 10 yard roll, 3.00 . . . per yard, .33 . . . per pound, .50 . . . per pound, .50 . . . per 10 yard roll, 4.50 36 " 36 4.4 2.6 46 46 46 46 46 46 46 46 58 " 11 11 11 58 110 41 . per yard, 58 " EGGSHELL, THICK, SMOOTH 58 inch, rolls weighing 30 to 40 pounds . . per pound, .50 58 " " " " " per 10 yard roll, 5.75 . per yard, 58 " 46 IX L HEAVY, SMOOTH WHITE PAPER FOR MONUMENT AND MARBLE WORKERS SPECIAL FOR AIR BRUSH WORK 42 inch, rolls weighing 30 to 40 pounds . . . per pound, .40 per 10 yard roll, 2.00 ii ii . per yard, 42 11 . per pound, 56 16 6.6 86. . per 10 yard roll, 3.00 56 11 56 11 . per yard, 46. 46 WHATMAN'S IMITATION. ROUGH SURFACE per 10 yard roll, 4.00 56 inch, . per yard, .50 56 11 STEINBACH'S PAPERS Steinbach's Solar Printing and Crayon Paper, 53 inch, Thin per yard, .35 16 " 58 " Thick " .50

Drawing Parchment, Medium, 38 inch per 20 yard roll, 3.00 per 10 yard roll, 3.20

Drawing Papers, Continuous - continued

FROST & ADAMS CO.'S

CLOTH BACKED OR MOUNTED DRAWING PAPERS

A.	Whatman's	Db	1. Ele	phan	t, Mtd.	27×	40 in.,	C. P.	P	er she	et, \$1.00
В.	0	Im	peria	1,		22×	30 "	11		11	.60
C.	Universal,	36	inch,	Mtd		per 1	0 yard	roll.	\$6.50	per y	ard, .80
C.	**	42	16	5.6			11		8.00	1.0	.90
B.	14	56	11	34			11		10.25	116	1.20
E.	Egg Shell,	24	110	11	2		16		6.50	16	.80
E.	44	30	16	24	4		110		8.00	2.6	.90
E.	16	36	110	11			44		8.50	110	1.00
E.	11.	42	11	11.	1		13		9 50	11	1.10
E.	11	54	66	44			44		10.50	64	1.20
E.	4.6	59	-	316			16		11.50	**	1.35
G.	Cartoon,	30	1.6	11			11.		6 50	- 11	.75
G.	4.6	60	11	110	-		10		12.00	44	1.30
L.	Leonine,	30	14	11			se.		8.00	166	.90
L.	11	36	11	10			44		8.50	11	1.00
L.	11.	42	44	2.0	12 1		44		9.50		1.10
L.	16	62	10	11			11		15.00	100	1.60
L.	-66	72	44	44			46		18.00	110	2.00
P.	Paragon,	36	11	10			16		8.50	1.6	1.00
P.	ii .	42	11	91			G.		9.50	11	1.10
P.		59	16	41			22		12.00	44	1.40
W.	Whatman's,	54	40	76	Imitatio	on	36		10.50		1.20
	The second second										1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

STRATHMORE'S WHITE DETAIL DRAWING PAPERS

Not Mounted

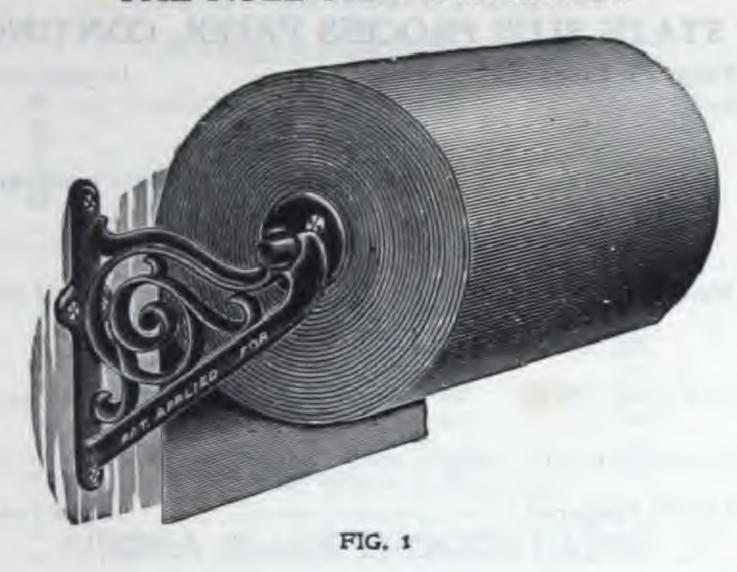
30	inch,	abou	t 30 lbs	to the roll		16			-		per 1b	30
36	44	46	35	11		-	- 4			-	24	.30
42	41	11	40	41.					-		11	.30
48	11	13	45	11	100	-	*	*	.+	+	1.0	.30

TRANSPARENT WHITE GELATINE

For Etchers and Engravers

Thin, 17×201/2 . per sheet, .25 | Thick, 17×201/2 . per sheet, .30

THE ROLL PAPER BRACKET



Roll Paper Bracket, complete

per pair, \$2.00

The above cut illustrates a new and useful device, which fills a want long felt by architects, engineers, draughtsmen, tailors and all those using paper in the form of a roll. It is also equally convenient in handling "Marline." Hitherto, no convenient method has been devised and it has been the custom to use some expensive and crude apparatus for suspending the rolls of paper

Having received many complaints as to the difficulty of handling roll paper, we are pleased to be able to place before our customers a simple and effectual device, consisting of a pair of ornamental black and gilt

brackets of unique design, as illustrated in Fig. 2. These brackets are formed to receive a roll provided with a flange (shown in Fig. 3) so made as to be screwed to the wooden plugs which are found in the ends of roll paper

These brackets can be screwed to the wall, desk or any convenient place, and the exact amount of paper which is required readily drawn down and cut off, thus saving great waste



FIG. 3



FIG. 2

FROST & ADAMS CO.'S

BAY STATE BLUE PROCESS PAPER, CONTINOUS

24	inch.	Thin,	Prepared,	for mailing		- 21			10 ya	rd roll,	\$1.00
30	16	16	115	11					44	44	1.25
36	9.5	3.6	16	434					88	V.C.	1.40
42	100	4.6	4.6	4.6						KI.	1.60
24	66	16	91		50	yard	roil.	\$3.00	Unp	repared,	
30	4.6	X.E	4.6			11.	AL.	3.50		11	2.35
36	11	18	40			4.6	44	4.00		3.6	2.80
42	-33	3.6	13			1.5	K.C.	4.50		66	3.30
24	44	Media	m Thick,	Prepared	ù.	1 6	40		10 ya	rd roll,	1.00
30	5.6		46	44		-			10	4.6	1.25
36	3.6		(4	4.					1.4	-93	1.40
42	11		110	4.6					48	**	1.60
24	4.6		4.6	40	50	yard	roll,	\$3.15	Unp	repared,	
30	14.6		111	9.6		16	13	3.75		4	3.35
36	44		44	.0		66		4.30		16	4.00
42	9.6		54.	100		14	**	4.85		64	4.70
24	34.6	Thick	, Prepared			4		*	10 ya	rd roll,	1.00
30	166	48	11					4.	44.	15	1.20
36	3.0	7.6	14.9				-		6.5	1.0	1.45
42	4.4	11.	44.	· v	*				61	4.6	1.60
24	44	14	310		50	yard	roll,	\$4.00	Unp	repared,	
80	4.7	4.6	16.0	4		66	44	4.75		-6	3.50
36	5.1	1.6	34	- 1		T.C.	+6	5.50		11	4.50
42	31	1.8	17	*		XX	5.5	6.25		2.4	5.25

LINAURA BLUE PRINT CLOTH

30 in.,	Prepared	10 yd	roll,	\$3.30	30 in.,	Unprepared	10 yd.	roll,	\$2.70
36 .4	71		44	3.60	36 11	74	10	38	3.00
42 11	64	10	14	4.80	42 11	410	10	11	4.20

Blueprint Cloth, on account of its strength, is preferred for prints intended for rough handling, especially in out-door work

MOULDED PAPER PULP CASES

For Preserving Drawings, Etc.



2×31 in.,	inside	measure	each,	.50	3×43 in.,	inside	measure	each.	- 80
2×37 **	44	4.6	4.6	.60	4×31 "	11	54	55	70
2×43 **	64	66	Xa.	.70	4×37 "	16	44	16	80
SXSL **	31	110	14	.60	4×43 "	44	1,976	13	.00
3×37 "	44.	56	44	.70	Larger	Sizes 1	nade to or	der	

VANDYKE SOLAR CLOTH

For Negative and Positive Prints

No. 231.	30 in.,	Vandyke	Cloth,	prepared	roll 10 yds	s., \$4.20
33.00	36 "	14	4.6	*1	4.6	4.80
(6.3	42 "	TR	14	- 11	ie	6.00
	54 "	4.6	6.6	66	88.	9.60

Fixing Salt and Full Directions accompany every roll

0 in

DIRECT BLACK PROCESS PAPER

ich	*	per 10 yard	roll, \$2	.50 42 in	ich .	per 10 inch roll, \$3.00
	4		. 2	.70		

Manipulation same as Blue Process Paper. One exposure and one washing; result, Black Lines on White Background

UMBRA BLACK PROCESS PAPER

0 inch	" ,	per 10 yard	roll,	\$1.65	42 inch , per 10 yard roll, \$2.35
6		N. S.	16	2.00	Requires Water Bath only

PREPARED NIGROSINE PAPER

Black Lines on a White Background. To Be Used With a Developer

) inch	per 10 ya	rd roll,	\$1 50	42 inch	per 10 yard roll, \$2.50
1 66	10	1.6	2.00		Company Services ve Control

DEVELOPER FOR NIGROSINE PROCESS. POWDER IN BOTTLES

ounce		per bottle, .60	16 ounce	per bottle, \$2.00
		4.10		

TUBES FOR PRESERVING BLUE PRINT PAPER



4	in., for	10 yard	roll	each,	\$1.00	24	in., for	50 ya	ard roll	each,	\$1.20
0	16	.,	11	- 67	1.15	30	**	16	44	2.6	1.40
6	66	161	**	99	1,25	36	44	74	111	11	1.55
2	*4	41	-66	KP.	1.35	42	14	-66	- (1	11	1.70

These Tubes are made of tin, with close fitting covers, and are the lest thing in which to keep the cut rolls of paper, as they exclude the ight and moisture

VANDYKE SOLAR PAPER

30	inch	, Medium	Thick			1		1		per 10 ya	ard roll	, \$1.80
36	11	44		-			-			44	4.5	2.10
42	13	11				4	+		-	36-7	31.	2.40
30	14	Thin, for	Mailin	ga	nd fo	or Ne	egati	ves		18	4.0	1.80
36	-	**	34		4.6		111		-	14	10	2.10
42	44	44	13		41		16.6	-		36.	14	2.40

Fixing Salt furnished with every roll

Vandyke Salt, for intensifying and fixing prints per 4 ounce box, .15

A Perfect Paper for Positive Prints, which is easily manipulated, keeps well, does not become brittle, prints rapidly, saves original tracing,

cannot spoil positive prints by over-exposure

From the original tracing a copy is made on Vandyke Paper with white transparent lines on an opaque dark-brown background. This copy is used in place of the original tracing to print from. Positive Copies, either Black Lines on White Background (by printing on Vandyke Paper, with an exposure of about one minute in strong sunlight) or Blue Lines on White Background (by printing on regular Blueprint Paper, with about four minutes' exposure in good sunlight, or on rapid Blueprint Paper, with about one minute exposure in good sunlight)

The thin and most transparent Vandyke Solar Print Paper is, of

course, the most suitable to make Postive Copies from

If a Vandyke Print is only to serve as a Negative, it should be made from a tracing placed into the frame with the wrong side (not picture side) against the glass. By this method the lines of the tracing come into direct contact with the surface of the sensitive paper thus shutting out all light that might otherwise come sideways between the tracing and the Vandyke Solar Paper

DIRECTIONS FOR MAKING VANDYKE PRINTS

If printing from an original tracing expose about one minute in

sunlight

The exposure is sufficient when the paper protruding over the edge of the original assumes a dark tan color, and when the lines of the original assume a little color on the copy. Wash the print for about three to five minutes in water (running water is preferable), and then, wet as it is, fix it by immersion in a solution consisting of about one half ounce of fixing salt to one quart of water

For a small number of Vandyke Prints it will be more convenient to apply the fixing solution with a brush or sponge. After the fixing solution has been applied, wash the print again in water and then hang it

up to dry

The simplest method to smoothen (for the purpose of printing) a large copy made on this paper is to roll it into the smallest possible size

STANDARD PROFILE PAPERS

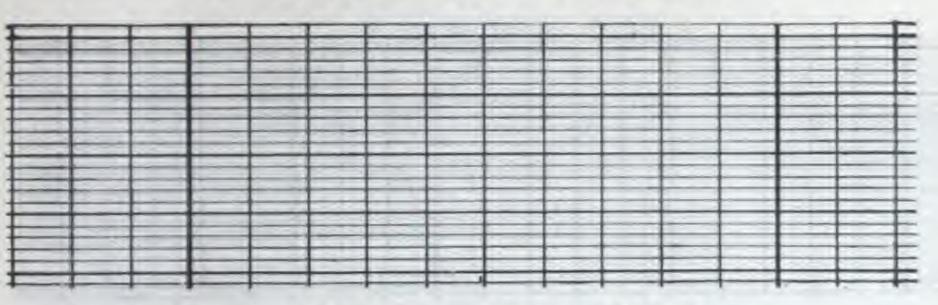


PLATE A, 4 = 20 TO ONE INCH

0.	Sheet	s, Eng	gravin	g 15×42	in.			per	luire	\$8.50	per sheet,	
3.		20 in.		700			E.		*		per yard,	.30
4.	4.1	10	4.6					14				.20
5.	6.4	20	164	Mounte	d on	Mus	slin		.0.		44	.75
6.	17	10	11.	4.4		4.6			-		-14	.50
7	146	20	in -	on Trac	ing !	Pape	r (C	rang	e onl	y)	10	.30

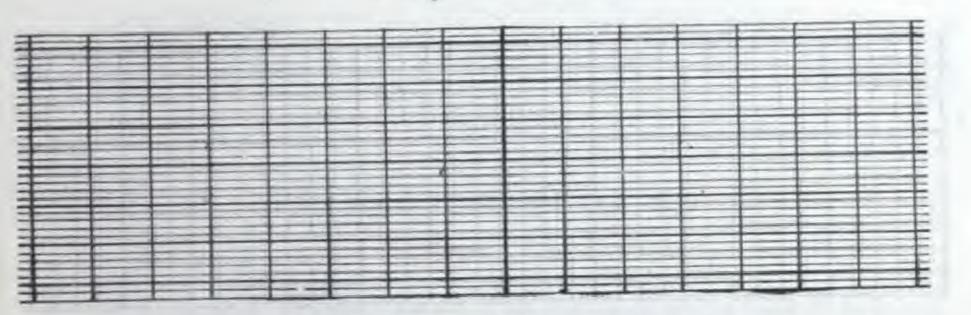


PLATE B, 4x30 TO ONE INCH

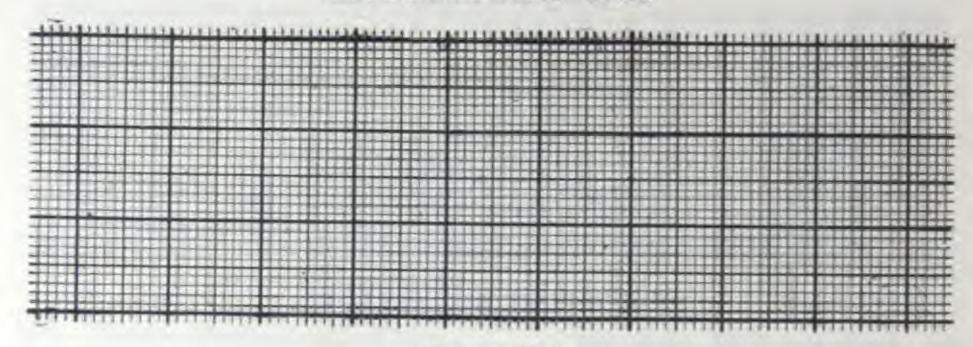
260.	Sheet	ts, E	ngravin	g 131/2 × 4	42 in	12		perq	uire,	\$8.50	per sheet,	
263.	Roll.	20 i	n. wide	-			- 2		+	12	per yard,	.30
264.	- 11	9	n							2	4.6	.20
265	11	20	44.	Mounted	lon	Mu	slin		1 2		14	.75
266.	11.	9	14.6	K.K.		2.5			2		60	-50
267.	44	20	Xi.	on Traci	ing 1	Pape	er (O	rang	e only	7)		.30

Unmounted in Rolls of 50 yards. Mounted on Muslin in Rolls of 20 yards. Printed in Orange or Green. We call attention to the quality of the paper we use for our "Standard" Profile and Cross Section Papers. It is a fine, tough Drawing Paper. The lines are more distinct than on other Profile Papers

Please state color when ordering above papers

CROSS SECTION PAPER

In Sheets and Rolls. Ruled

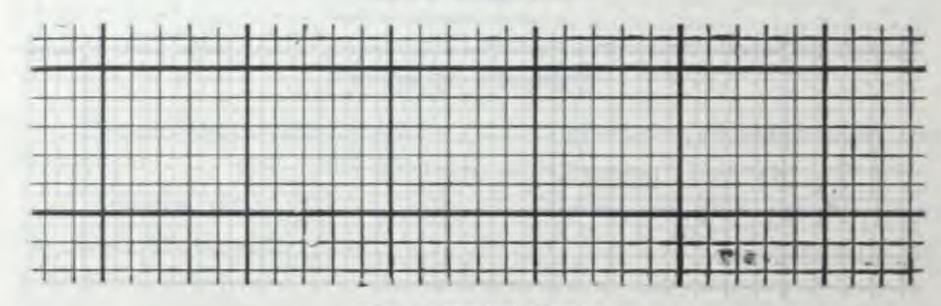


MILLIMETER

300.	Shee	ets, l	-	g, 40×50							per she	et, .20
301.	- 17		1.0	40×50		on	T	racin	g	Pape	T	
	(0	rang	ge only)				4	per qu	ire	, \$3.50	per she	et, .20
303.	Roll	, 50	cm. wide					-	v		per ya	rd, .24
305.	16	50	11	Mounted	011	Mus	lin	L v		-	in	.65
306.	16.6	75	3.6					-			186	.50
308.	10	75	16	Mounted	OII	Mus	lin		2			1.00
307.	16	50	11.	on Tracin	ng I	aper	(Orange	on	ly)	55.	.24

CROSS SECTION PAPER

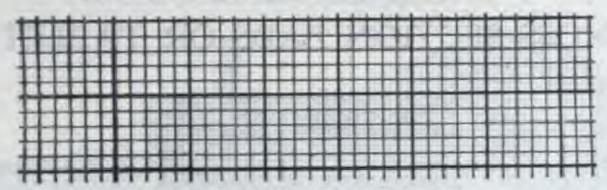
In Sheets. Ruled



8 x 8 TO ONE INCH

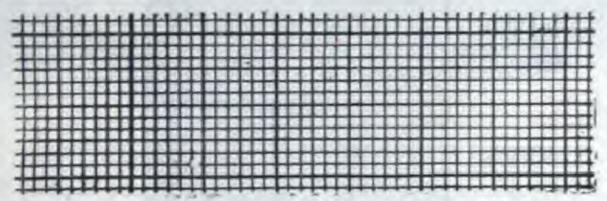
310. Sheets, 161/4 × 211/8 in. . . . per quire, \$3.50 per sheet, .20 311. " 1614 × 2178 " on Tracing Paper (Orange only) (Orange only) per quire, \$3.50 per sheet, .20 Please state color when ordering above papers

CROSS SECTION PAPERS



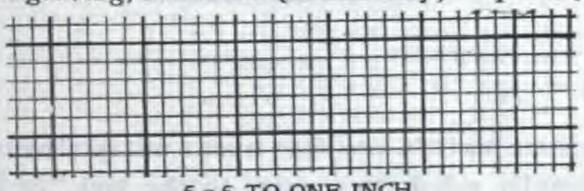
5 x 5 TO ONE-HALF INCH

320 B. Sheets, engraving, 16 × 20 in. quire, \$3.50 sheet, .20 16×20 " on Tracing 321 R. 3.50 Paper (Orange only)



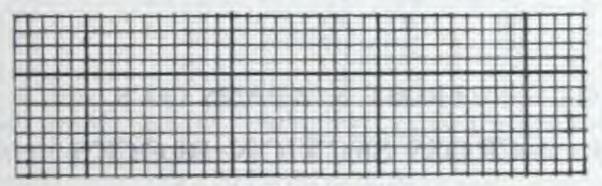
12 x 12 TO ONE INCH

Sheets, engraving, 16 x 20 in. (Green only) quire, \$3.50 sheet, .20 322.



5 x 5 TO ONE INCH

330. Sheets, ruled, 16×21 in. (Blue only) . quire, \$1.00 sheet, .05



10 x 10 TO ONE INCH

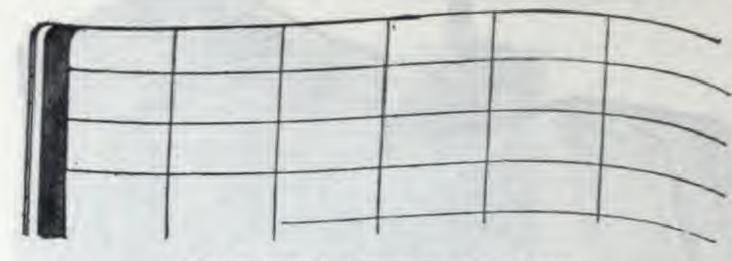
331. Sheets, ruled, 16×21 in. (Blue only) . quire, \$1.00 sheet, .05

FROST & ADAMS CO.'S CROSS SECTION PAPERS

quire, .40 sheet, .02 333. Sheets, engraved, 6 × 8 in. .60 " 334. Sheets, engraved, 71/2 × 10 " .03

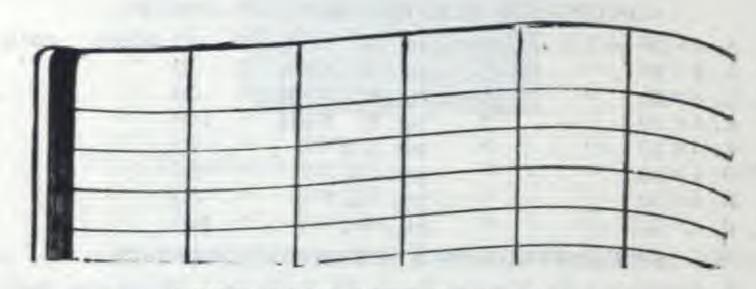
Both sizes printed in Blue, Dark Olive Green, Light Yellow Green Divided 1 inch, 1/2 inch, 1/4 inch, and subdivided 20 parts to the inch Used by Massachusetts' Institute of Technology, Cornell University, and others. Please state color when ordering above papers

ENGINEERS' FIELD, LEVEL AND TRANSIT BOOKS



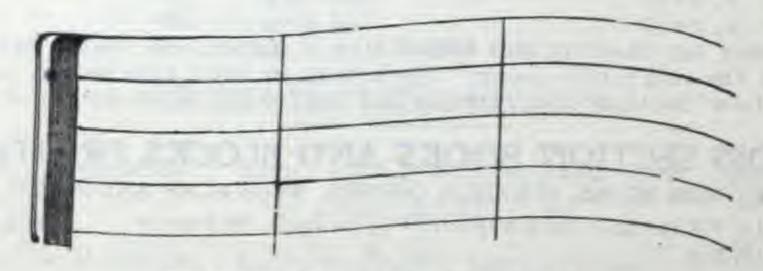
FIELD BOOK, LEFT-HAND PAGE

Field Book, 4 ×7 inches, 80 leaves with Locke's Tables . each, .50 41/2×71/2 inches, 80 leaves with Locke's Tables . " .60



LEVEL BOOK, LEFT-HAND PAGE

Level Book, 41/2 × 71/2 inches, 80 leaves with Locke's Tables each, .60



TRANSIT BOOK, LEFT-HAND PAGE

Transit Book, 41/2 x 71/2 inches, 80 leaves with Locke's Tables each, .60

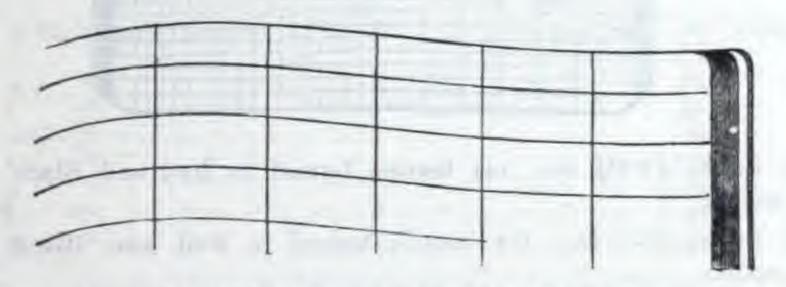
The paper is high grade, taking both ink and pencil. Substantially bound in sheepskin to open flat. Round corners.

Engineers' Field, Level and Transit Books-continued



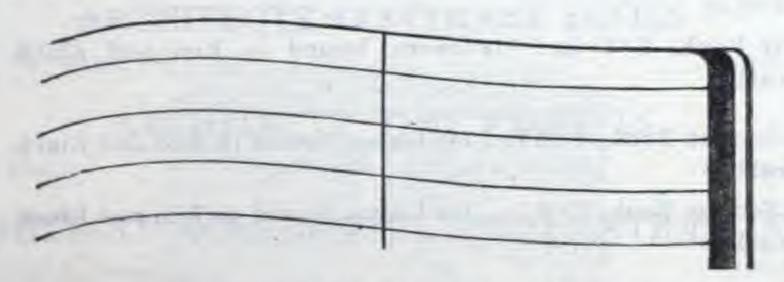
FIELD BOOK, RIGHT-HAND PAGE

Description and prices opposite



LEVEL BOOK, RIGHT-HAND PAGE

Description and prices opposite

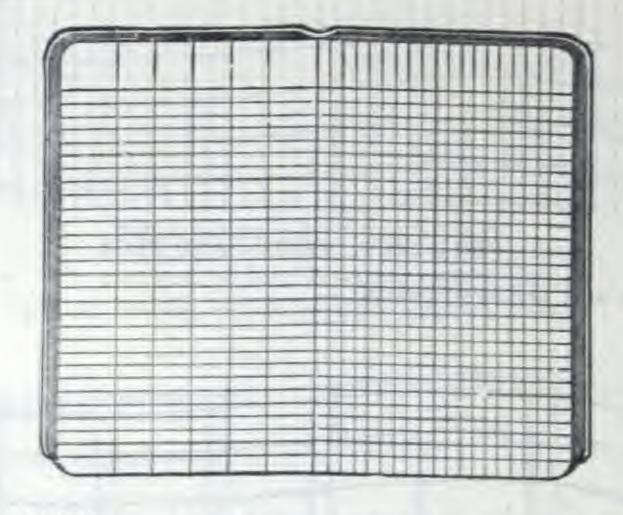


TRANSIT BOOK, RIGHT-HAND PAGE

Description and prices opposite

LEVEL, TRANSIT AND ENGINEERS' FIELD BOOKS

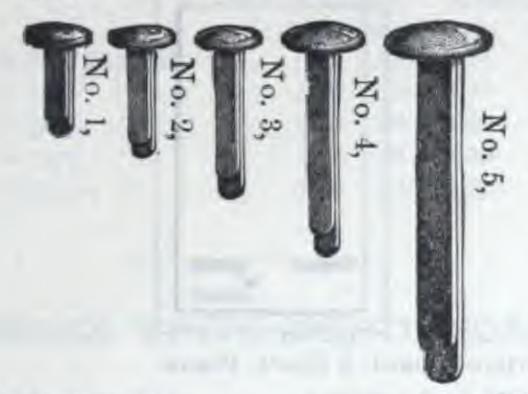
Bound in Leather



Level Book,	4×6½	in.,	114	leav	es,	boun	d in	Red	and	Black		
Leather						*	+	*			each,	.50
Level Book,	5×8 i	n.,	144 1	eaves	, b	bano	in :	Red	and	Black		
Leather			*		*		1	-			**	.75
Transit Book	s, 4×6	½ in.	, 144	1eave	s, b	ound	in R	ed Ci	oth o	nlv	cr	.50
Transit Book	, 4×6	in.	, 14	4 leav	es,	boun	d in	Red	and	Black		.00
Leather											11	.50
Transit Book										Black		
Leather						*		*			10	.75
Cross Section	Book,	4×6	in., 1	144 le	ave	s, bou	nd in	n Red	and	Rlack		
Leather											in	.50
Cross Section								n Red	and	Black		.00
Leather	*	*	*		*	*					**	.75
Field Book,	4×6%	in.,	144	leave	s. 1	oound	in	Red	hre	Rlack		
Leather										DIACK		50
Field Book,	5×8 ir	1., 14	14 le	aves,	bo	und i	in F	Red a	and	Black		.50
Leather											**	.75
With printe												

McGILL'S PATENT PAPER FASTENERS

Regular Sizes. Round and Flat Heads



No. 1.	M in.	shank.	Round					per 100,	.35	Flat,	.25
2.	3/2	16	16					14	.38	11	.27
3.	34	10	10					14	.40	1.1	.30
4.	1	11.	44	100				1.5	.45	ri.	.35
5.	136	17	0.4			-		18	.85	100	.63
6.	11%	16	24					11	1.00	4.0	.70
7	2	310	- 11		No.	101=	11.5	52	1.20	15.0	1.00
8.	8	4.1	16		-	- 1	1 Elva	3.6	1.60	16.6	1.40
9.	4	44	-34					10	2.40	1.6	2.00

ARCHITECTS' CERTIFICATE BOOKS

100 Receipts		each 75	200 Receipts		each, \$1.25
TOO MEEE This		COLLIN . FU	Lin recections		Secretary for the

ARCHITECTS' CONTRACT BOOKS

Round, 50 pages, 81/2 × 14					*-		14	each, \$3.50
----------------------------	--	--	--	--	----	--	----	--------------

ARCHITECTS' TIME RECEIPTS

50 on a Block .	. each, .30	100 on a Block		4	each, .50
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ARCHITECTS' AGREEMENTS, SPECIFICATIONS, ETC.

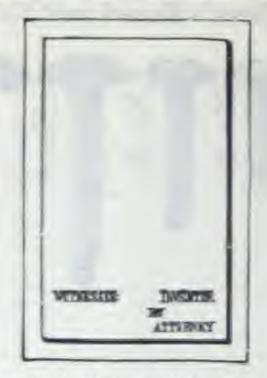
Architects'	Agreements .						141	4.	each, .05	
	Specifications .		14	4	14	-	4		.30	
Architects'	Uniform Contract	8 .	12			- 60			.05	i

ENAMEL CLOTH FOR ARCHITECTS

Used	to	Cover	and	Protect	Plans	and	Tracings
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					-		10
54 inches wide			 14	141	per	yard,	.40

SUPERIOR BRISTOL BOARDS

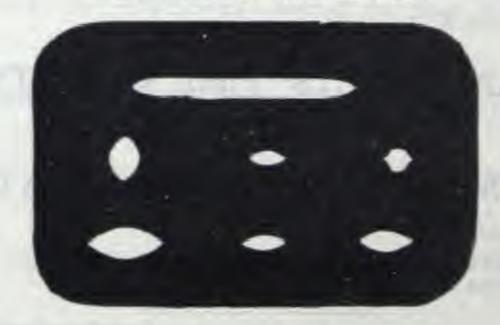


Patent Office Bristol Board, 3 Sheet, Blank

10×15 inches (U. S. size)	4	- 4		per	gross	\$6.50	per	dozen	. 60
15×20 " (English size)) .	*				13.00	-	11	1.20
Patent Office Bristol Board	d, 3	Sheet,	Prin	nted	with l	Border	, etc		
10×15 inches				per	gross.	\$8 65	per (lozen	85

This Bristol Board has a Hard Surface, possesses Unlimited Erasing Properties, and can be rolled without injury. It has the Thickness, Color, Quality and Size required by the U.S. Patent Office and is far preferable to other Bristol Boards, because it does not have their high glossy surface

ERASING SHIELDS



			ickel Plated,			*	each,	.25
Celluloid	Erasing	Shield,	Transparent,	21/2×41/2	Sher		44	.20
110	11	**	11	3×5	16	790	100	.25

REYNOLDS' WHITE BRISTOL BOARDS

				2 SH	EET	3 SHEET		4 SHEET	
0	101/9121/	inches		Dozen .60	Sheet		Sheet	Dozen \$1.20	Sheet
Cap,	121/2×151/4	inches		.00	.10				
Demy,	14 16 × 18 14	11	-	1.00	.15	1.40	.20	1.90	.25
Medium,	161/2×201/4	11	4.	1.30	.20	1.90	.25	2.60	.30
Royal,	18¼×22¾	10		1.60	.25	2.50	.35	3.30	.40
Imperial,	22 × 28 14	16		3.20	.40	4.80	.45	6.40	.55

SHAMROCK WHITE BRISTOL BOARDS

			2 SH	EET	3 SF	HEET	4 SHEET	
			Dozen	Sheet		Sheet	Dozen	
Cap,	121/2 × 151/4 inches	14.	.60	.10	.90	.15	\$1.20	.15
Demy,	1438×1814 ""		1.00	.15	1.50	,20	2.00	.25
Medium,	161/2×201/4 "		1.30	.20	2.00	.25	2 70	.30
Royal,	1814×221/8 "		2.00	.25	2.70	.35	3.50	.40

STRATHMORE

PATENT OFFICE WHITE BRISTOL BOARDS

10×15, Plain				4	per	100 sheets,	\$3.90	per doz.,	.50
10×15, Ruled	1		+	4.	1.6	100 "	4.40	**	.60

FROST & ADAMS CO.'S

SUPERIOR WHITE WEDDING BRISTOL BOARDS

For Pen and Ink Work

Barrington Bristol,	22×28 in	nches		121	4	12.0	per shee	t, .25
Epson Bristol,	22×28	**	4	*	1.		116	.35
Eagle Bristol,	22×28	41			14.1		- 146	,20

DRAWING PAPERS OR BRISTOL BOARDS

White, Smooth or Rough Surface

No. 5.	1 Shee	et, A, 23 × 29		per 100 sheets,	\$ 6.00	per shee	t07
		B, 141/2 × 23	1.6	0	3.00	11	.04
**	14	C, 111/2×14	1/2 11	49	1.50	- 24	.02
No. 7.	2 Shee	t, A, 23 × 29	41	44	12.00		.12
	4.6	B, 141/2 × 23		46	6.00	- 11	
**	11	C, 111/2×14		×1		11	-06
No. 8.	4.6	A, 23 × 29		44	3.00	11	.03
66	4.6	B, 141/2 × 23		44	12.00	.74	.12
4.6	11	C, 1114×14		6	6.00	11	-06
No. 10.	3 Shee	t,A, 23 ×29		96	3.00		.03
44	11	B, 141/2×23		**	18.00	*1	.18
4.6	100			44	9.00	11	.10
No. 11.	141	C, 11½ × 14			4.50	11111	.05
110, 11,	11	A, 23 × 29			18.00	A.E.	.18
44	-11	B, 141/2 × 23		**	9.00	-51	.10
No. 10	101	C, 111/2×14	/2	4.6	4.50	11	.05
No. 12.	4 Shee	t, A, 23 × 29			24.00	4.0	.25
14	84	B, 141/2 × 23			12.00	×.c	.12
** **	- 11	C, 111/2×14			6.00	44	.06
No. 13.		A, 23 × 29	5.0		24.00	41	.25
11	-66	B, 141/2 × 23	K4	44	12.00	44	
44	.00	C, 111/2×14	1/2 11	16	6.00	40	.13
No. 14.	5 Shee	t, A, 23 × 29	16	10	30.00	4.6	.06
14	**	B, 141/2×23		11	15.00	10	.30
43	A.F.	C, 111/2×14		1.6		14	.15
No. 15.	4.6	A, 23 × 29		- 68-	7.50		.10
64	43	B, 141/2 × 23	(1	15	30.00	44	-30
XX	1.0	C, 1132 × 143	211	11	15.00	**	.15
		C, 11/2 / 14)	2	THE RESERVE	7.50	- "	.10

STRATHMORE VELLUM MOUNTS

	No. 738. 739.	2 Sheet,	22½ × 28½ 22½ × 28½	in.,	white buff	100 sheets,			
-	740.		22½×28½			**	6.00	**	.07
	741.	3 Sheet	221/2 × 281/2		DIOWH	41	6.00	**	.07
	742.	o once,	221/2 × 281/2			**	8.75	165	.10
	743.	**	22 1/2 × 28 1/2	100	buff		8.75	110	.10
	744.		22½ × 28½		brown	45	8.75	E.C.	.10
	745.	o Sheet,			white	- 11	14.50	64	.15
	746.	15	221/2 × 221/2		buff	17	14.50	-61	.15
	130.		22½ × 28½	**	brown		14.50	11.94	.15

STRATHMORE RIPPLE MOUNTS

No. 679. 680. 681.	11	22½ × 28½ in., 22½ × 28½ '' 22½ × 28½ ''	buff	100 sheets,	8.00	- 11	.10
		d on applicatio			8.00	· ·	.10

STRATHMORE MARBLE MOUNTS

No.	725.	2	Sheets,	221/2×281/2	in.,	white	and	buff	100	sheets,	\$8.00	sheet,	.10
	726.		44	221/2×281/2		sepia :				11	8.00	0.4	.10
	727.	4	Sheets,	221/2×281/2	15	white	and	buff		11	14.00	4.6	.15
	528.		11	221/2 × 281/2		sepia :	and	brown	1	11	14.00	1.5	.15
	729.	25	Points,	221/2×281/2	15	white				16	9.00	66	.10
	730.		46	221/2×281/2		buff				6.0	9.00	11	.10
	731.		10	221/2×281/2	11	brown				11.	9.00	4.6	.10
	732.	50	Points,	221/2×281/2	44	white				4.6	12.00		.15
	733.		**	221/2×281/2	11	buff				11	12.00	41	.15
	734.		16. 1	221/2×281/2		brown	CHA			11	12 00	11	.15
	735.	75	Points,	22½ ×28½	66	white				4.4	15.00	1.6	.18
	736.		11	221/2×281/2		buff				44	15.00	10	.18
	737.		11	221/2×281/2	**	brown	9 .	- Dec		14	15.00	11	.18

STRATHMORE ILLUSTRATION BOARDS

For Illustrations, Wash and Water Color Drawings

Illustration	Boards,	22×28 in.,	thick				doz.,	\$3.00	sheet,	,25
11	**	20×30 "	-66			-	44	2.40		.20
16	ii.	30×40 4	66		4.	1 6	11	4.80	4.6	.40
4.6	**	22×30 "	lightw	eight		16	10	2.00	**	.25

WINSOR & NEWTON'S ILLUSTRATION BOARDS

For Illustrations, Wash and Water Color Drawings

Imperial,	20×30	in.,	thin .	per doz.,	\$3.75	per sheet,	.30
**	22×30			11	4.20	41	.35
Double Elephant,	30×40		thin	- 11	6.00	**	.50
16	30×40			**	7.00	***	.60
***	30×40	44	special	**	5.00	11	.45

Special prices by the 100 sheets

Samples furnished on application

WINSOR & NEWTON'S

WATER COLOR SKETCHING BOARDS

London Made

Imperial Size 2114 ×	29 inches	C. P. Surface			each,	.60
Imperial Size 21 14 ×	29 inches,	H. P. Surface	120	5		.60

Mounting Boards covered on one side with Whatman's Drawing Paper

WINSOR & NEWTON'S

WATER COLOR SKETCHING BOARDS

American Made

Imperial Size,	22×30	inches,	C.	P.	Surface,	72 lbs.		each,	.40
111	4.6	x 6	H.	P.	4.6	11		1.88	.40
	20×30		C.	P.	11	140 lbs.		- 11	.70
164	1.1	4.5	H.	P.	- 19	110		166	.70

Mounting Boards covered on one side with Whatman's Drawing Paper

LINEN FACE WATER COLOR BRISTOL BOARD

Size 22 × 28 per doz., \$1.50 per sheet, .15

This board has a smooth linen finish and is made about the same thickness as post cards, is expressly intended for decorative water color work such as Hand Painted Post Cards, Season Cards, Birthday Cards, Dinner Favors, Tally-Place Cards etc. Samples on Request.

FRISKET, OR AIR BRUSH TRACING PAPER

Very Transparent

Frisket Paper, 20×24 inches, very transparent perdoz., \$2.00 per sheet, .15

FROST & ADAMS CO.'S ILLUSTRATION BOARDS

Illustration Boards, 30×40 inches, thick per doz., \$4.80 per sheet, .40 Illustration Boards, 20×30 inches, thick 2.40 ' 2.40 ' .20

For Illustrations, Wash and Water Color Drawings Send for samples

WHITE CARD BOARDS FOR MOUNTING PICTURES

4	Ply,	22×28	sheet,	.06	12	Ply,	22×28	sheet,	.12	14	Ply,	30×40	sheet,	.25
6	44	1.6	4.6	.07	14	4.5	11	1.4	.15	12		20 × 44	24	.25
8	44	1.6		.08	16	**	- 11	16	.20	12	41	28×44	46	.30
10	44	66	4.0	.10	12	- 11	30 × 40	-6.6	.25	10	44	30 X 44	11	.35

COLORED, MELTON CARD BOARDS FOR MOUNTING PHOTOS

5 Ply Carbon, 22 X	28, per sheet,	.10	10 Ply Carbon, 22×28 per sheet, .15
" Sct Gray "		.10	" Sct Gray " .15
" Steel Blue "	1 11	.10	" Steel Blue " .15
" Ivy Green "	4. 44	.10	" Ivy Green " .15
" Brown		.10	" Brown " .15
10 Ply Carbon 30×	40 "	.30	10 Ply Ivy Green, 30 × 40 '' .30
" Sct Gray "	- 44	.30	Brown " .30
" Steel Blue"		.30	

POSTER BOARDS, COLORED, THIN FOR MOUNTING PHOTOS

Carbon I	Black, 30×40	per sheet,	.12	Brown, 30×40		pe	r shee	t, .12
Green	46		.12	Drab "			Cr.	.12
Red	64	- 11	.12	Set Gray "	110		5.6	.12

EXTRA SMOOTH PULP BOARDS FOR MOUNTING PICTURES

Thick, 30×40	per sheet, .10	Triple, 30×40	per sheet, .25
Double "	.15		

CARTRIDGE BOARDS FOR WATER COLOR PAINTING

Tinted

Bx1, White, 22	×34	per sheet.	.12	Bx10, Yellow, 22×34 per sheet,	.12
Bx2, Pink	42	a	.12	The state of the s	.12
Bx3, Blue	16	- 41	.12	Bx12, Purple "	.12
Bx4, Green, Lt.	316	66	.12	Bx13, Maroon "	.12
Bx5, Cream	66	51	.12	Bx14, Gray, Dk. " "	.12
Bx6, Gray, Lt.	16	- 0	.12		.12
Bx7, Brown	26.	44	.12	Bx16, Brown, Dk."	.12
Bx8, Red	**	- 19	.12	Bx17, Gray, Med. "	.12
Bx9, Salmon	-11		.12	The state of the s	

Full line of Samples furnished to Dealers on application

MAT BOARDS

For M	lounting	or l	Picture	Mats	, wi	th an	Egg	Shell	or	To	rchon	Surface,
	Cream											

No. 0.	Thin,	30 × 40				100	per sheet.	.20
x.	Thick,	30×40				21	1	.30
XX.	Double Thick,	30×40					15	.40
XXX.	Treble Thick,	30×40	4	140		100	16	.50
x.	Thick,	38×52				-	18	.50
XX,	Double Thick,	38×52	158	4		-	11	.75
XXX.	Treble Thick,	38×52			14	4	46	1.00
X.	Smooth Gold,	30×40			-		14	1.50
X,	Light Rough Gold,	30×40					P.6	1.40
X.	Dark Rough Gold,	30×40		7		4	46	1.40

COLORED MAT BOARDS

Colored Mat Boards, 30 × 40 inches	per sheet, .25
No. 46. Yale Blue	No. 86. Smooth Light Gray
70. Rough Red	861/2. " Dark Gray
71. " Green, light	87 " Nut Brown
79 " Vellow	8716 " Medium Grass
73. " Blue	88 " Medium Cease
74. " Brown	87. " Nut Brown 87½. " Medium Gray 88. " Medium Gray 99. " Jet Black
75. " Terra Cotta	891/2. " Gray Green
77. " Red	
78. " Dark Green	
79. Smooth Red	92. Smooth Blue Gray
	100. " Pale Gray
80. Smooth White	118. "Fawn
St. Rough White	119. " Plum
82A. Smooth Brown	120. " Red Brown
821/2. " Wine Tint	121. Rough Cream
83. " Dark Brown	122. Rough Gray
84. " Dark Green	125. Smooth Brown
QII/ II Tight Creen	118. "Slate
85. " Cream Tint	126. " Brown
851/2. " Cream Tint	127. " Dark Brown

VENEER BOARDS

		ches					:			per		.30
Wood	Color,	20×30	in.	10	No.	117	L.	Gray	Color		20×30	in.
Oak	Ct.	66	14							-		11
Gray	11	11	14	1							46	10
	11	41	11	15					ganv.		24×40	51
Green	er.	.43	4.6	10					~ .			51
Olive	**	**	**									
	Wood Oak Gray Steel Green	Wood Color, Oak " Gray " Steel " Green "	Wood Color, 20×30 Oak " " Gray " " Steel " "	Wood Color, 20×30 in. Oak Gray Steel Green """ ""	Wood Color, 20×30 in. Oak Gray Steel Green Green	24×40 " Wood Color, 20×30 in. No. Oak " " " " Steel " " " " Green " " " "	24×40 " Wood Color, 20×30 in. No. 117 Oak " " " 117 Gray " " " 117 Steel " " " 128 Green " " " 124	24×40 " Wood Color, 20×30 in. No. 117L. Oak " " " 117M. Gray " " 117N. Steel " " 123. Green " " 124.	24×40 " Wood Color, 20×30 in. No. 117L. Gray Oak " " " 117M. Wood 117N. Gray Steel " " 123. Maho Green " " " 124. Oak,	Wood Color, 20×30 in. No. 117L. Gray Color Oak " " " 117M. Wood " 117N. Gray " Steel " " 123. Mahogany, Green " " 124. Oak,	24×40 " Wood Color, 20×30 in. No. 117L. Gray Color, 117M. Wood " Gray " " 117N. Gray " 117N. Gray " 117N. Gray " 123. Mahogany, 124. Oak,	Wood Color, 20×30 in. No. 117L. Gray Color, 20×30 Oak " " " 117M. Wood " " 117N. Gray " " 117N. Gray " " 128. Mahogany, 24×40 Green " " " 124. Oak, "

Samples furnished on application

HALL'S STYK-UM-PHAST GUMMED CLOTH

In 10 Yard Rolls, 10 Colors, 1/8 in. Wide

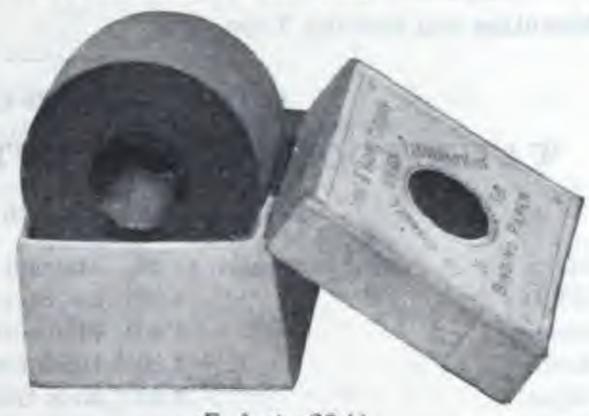
Lt. Green do	z. rolls,	\$1.20	each	10	Ecru	doz. rolls,	\$1.20	each	.10
Dark Green	11	1.20	11	.10	Gray	*1	1.20	11	.10
Blue	86	1.20	66	.10	Brown	110	1.20	11	.10
Black	11	1.20	86	.10	Red	11	1.20	76	.10
White	36	1.20	14	.10	Maroon	47	1.20	16	.10

FROST & ADAMS CO.'S CORNHILL PASSEPARTOUT BINDING PAPER

Gummed. In 25 Feet Rolls, 11/4 in. Wide



HALL'S



F. & A. CO.'S

AND RESIDENCE OF THE PERSON NAMED IN COLUMN

White	doz.	rolls,	\$1.80	each,	.15	Red	doz. rolls,	\$1.80	each,	.15
New Gree	n	16	1.80	66	.15	Maroon	***	1.80		.15
Black		16	1.80	44	.15	Sage Gree	n "	1.80	4.6	.15
Brown		14	1.80	4.0	.15	Med. Steel Gra	V 66	1.80	44	.15

The best Binding made for Framing and Preserving Pictures. Tough Pebbled Paper, gummed. Soft colors, ready for use, guaranteed to stick

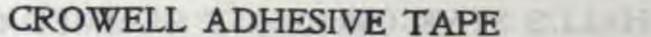
FROST & ADAMS CO.'S

BAY STATE PASSEPARTOUT BINDING PAPER

Gummed. In 12 Yard Rolls, 7/8 in. Wide

White	doz. rolls,	\$1.20	each,	.10	Black	doz. rolls,	\$1.20	each	10
Gray	14	1.80	4.6	.10	Brown	- 11	1.20	81	.10
Red	46	1.80	66	.10	Green	44	1.20	46	.10
Crimson	16	1.80	4.6	.10	Blue	1.6	1.20	65	.10
New Gree	n **	1.80	46 -	.10	Bright Gol	ld "	1.20	42	10

Packed one dozen rolls of each color in a box. Sample cards furnished





For the use of Draughtsmen and all who have occasion to mount or stretch paper for Drawing, Designing or Painting, and for binding drawings to prevent them from being torn

Made in 50 foot Rolls, put up in a neat, sealed paper box, with the end of the Tape through a slit in the periphery of the box, which can be drawn from the Roll and cut in lengths to suit, Absolutely no waste

Mounting and Binding Tape

per 50 foot roll, .25

FROST & ADAMS CO'S

WATERPROOF PASSEPARTOUT BINDING PAPER

In 5 Yard Rolls, 11/4 Inch Wide

Black ,	7	per dozen	rolls,	\$1.20	Maroon . pe	r doze	n rolls	\$1.20
White.		71	11	1.20	Lt. Steel Gray	66		1.20
Brown		**	**	1.20	Medium Gray	-63	24	1.20
Red .		316	16	1.20	Dark Gray	44	110	1.20
Sepia .		44	44	1.20	New Green	14	88	1.20
Blue .	4	34.	12	1.20	Sage Green	4.6	10	1.20
Olive Gre	en	. 11	3.6	1.20	Gold	1142	-01	2.40

Same Colors in Rolls 5, 10, 25, 50 and 100 yds. 25 in. wide per yard, .30

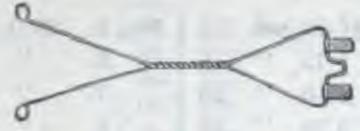
DENNISON'S GUMMED PASSEPARTOUT BINDING

In 12 Yard Rolls, except Plaid contains 5 yards, width 1/8 in. except Nos. 21 and 22, 1/4 in.

No. 1.	Black	doz. rolls,	\$1.20	No. 10. Dull Silver do	z. roll	s. \$2.40
2.	White	44	1.20	15. Sage Green	44	1.20
3.	Gray	11	1.20	16. Scotch Plaid	-6.6	1.20
4.	Bottle Gree	n "	1.20	18. Bright Gold	44	2.40
5.	Brown	61	1.20	19. Bronze Blue	4.6	1.20
6.	Red	4.4	1.20	20. Bronze Green	111	1.20
7.	Blue	4.6	1.20	21. Narrow Gold	F 6	1.20
8.	Crimson	- 8.6	1.20	22. Narrow Silver	44	1.20
9.	Dull Gold	4.6	2.40	23. Bronze Violet		1.20

Sample cards furnished on application

FROST & ADAMS CO'S WHITE WIRE EASEL BACK RESTS



O'CO				-								
3 inch				per dozei	1, .28	9	inch	09.1	0.11	-	per dozen,	-50
4 11				16	.30	10	1.0	4	4		11	.56
5 11				4.0	.32	11	4.6	4	-		4.0	.60
8 11				- 11	.36	12	16				16	.70
7 **	100	100	l au	48.4	-44	14	34	ШЭ.	SIS.	1.2	1.6	.80
8 "	- 1	-		+6	.48							
					1.1	4						

FROST & ADAMS CO'S BRASS WIRE EASEL BACK RESTS

			per doze	n65	93	inch	-	+	per doze	n,1.10
			14	.70	10	4.4	-		16	1.15
			11	.75	11	11			1.6	1.25
-	*		110	.80	12	16		-	44	1.35
			140	.85	14	11			14	1.65
	07.500	OÜ:	COLLAR	1.00						

FROST & ADAMS CO'S

PERFECTION BRASS WIRE EASEL BACK RESTS

inch		.3	per dozen	\$1.04	8 i	nch	12		per dozen	, \$1.80
11	-	0	11	1.20	9	11			11	1.94
-0		- 6	14.	1.34	10	116		1	44	2.24
44			it.	1.50	12	11			6.6	2.40
	100		110	1.64	1.4	0.0			- 60	2.70

FROST & ADAMS CO'S BRASS PASSEPARTOUT RINGS





FULL SIZE CUT

Packed one gross in a box per dozen, .10

Special Catalogue of Wire Goods furnished on application

WHITE BRAIDED WIRE PICTURE CORD

25 Feet, Full Length

No. 0.	25 ft.	per doz.,	\$1.25	each,	.12	No. 5.	25 ft.	per dez.,	\$5.00	each,	.40
1.	4.6	41	1.75	. 0	.15	6.	11	10	6.50	44	.50
2.	14	4.0	2.50	110	.20	7.	100		8.50	4.6	.60
3.	11	KC.	3.25	11	.25	8.	**	11	11.00	11	.75
4.	**	**	4.00	16	.35						

WHITE BRAIDED WIRE PICTURE CORD

25 Yards, Full Length

No. 0.	25 yds.	per doz.,	\$2.50	each,	.20	No. 5.	25 yds.	per doz.,	\$10.00	each, .75
1.	**	22	3.50	11	.30	6.	44	11	13.00	" 1.00
2.	.00	46	5.00	44	.40	7.	11	11	17.00	"1.20
3.	4.6	1.6	6.50	1.5	.50	8.	16	4.6	22.00	1.50
4.	11	14	8.00	**	.60					

GILT BRAIDED WIRE PICTURE CORD

25 Feet, Full Length

No. 10.	25 ft.	per dor.,	\$3.00	earb,	.30	No. 15.	25 ft.	doz.,	\$16.00	each,	\$1.50
11.	44	46	4.50	11	.45	16.	16	12	20.00	14	1.75
12.	EA	93	6.50	0.6	.60	17.	Tir.	1.5	25.00	44	2.25
13.	66	66	9 00	11	.90	18.	-(1)	· re	30.00	64	2.50
14.	**	11.0	12.00	117	1.20	1					

GILT BRAIDED WIRE PICTURE CORD

25 Yards, Full Length

No. 10.	25 yds.	per doz.,	\$6.00	each,	.50	No. 15,	25 yds.	doz.,	\$32.00	each.	\$2.50
11.	**	44	9.00				**	11	40.00		3.25
12.	- 61	11	13.00	-41	1.25	17.	11	**	50 00	14	4.00
13.	11	18	18.00	24	1.60	18.	4.0	11	60.00	40	4.50
14.	16	4.	24.00	14	2.00						

Special Catalogue of Wire Goods furnished on application

WIRE BRADS FOR PICTURE FRAMES

in. long,					\$1.00	1	in long,					per lb.	
14		20			1.25	1	11.		19			10	.53
12	**	21	44	14	1.55	1	. "	11	20	11			.64
116	44	22		4.6	1.90	178	in. long,				Gauge		.30
in. long,	No.		Gauge	**	.80	158				Gauge		18	.31
**	14	19		16	.90	11/8	- 14	1.0			Gauge	11	.32
14	4.6	20	16	4.6	1.00	11/8			16	Gauge		2.4	.35
1.6	46	21	44	1.6	1.25	11/8	44	5.6	17	4.8		6.6	.40
64	**	22	44	16	1.55	11/8	-14	6.6	18	44		16	.43
in. long,			to 16 Gau	ge 11	.55	11/8	44		19	11		1.6	.53
11		17	Gauge	11.	.60	114	and 1 3/8 in	. lon	g, N	0. 6 to	12 Gaug	0 16	.29
1.8	1.6	18	K.C.	16	.65	114	" 13/8	38	×.	13 (lauge	4.2	.30
16	4.5	19	44	16	.75	114	" 13/8	44	4	14	36	16	.31
CE	**	20	**	14	.85	114	" 13/8	11		15	44	56	.32
11	EF	21	6.6	16	1.00	114	" 13/8	18.8	*	16	44	. 66	.34
14	1.5	22	61	1.6	1.25	114	" 138	**		17	4.6	4.6	.39
in. long,	No.	12	to 14 Gar	ige 'c	.43	11/2	and 1 58in	. lon	g. N	0. 4 to	13 Gaug	0 **	,29
14		15	Gauge	16	.45	11/2	" 1 5%	16	5.0	14 (16	.30
16	11	16	11	16	.50	11/2	"1 15%	11	0	15	66		.31
1.0	44	17	111	16	.52	11/2	11 158	35.		16	61	16	.33
1.1	4.6	18	44	11	.58	11/2	11 156	11	1	17	44	16	.38
44	ce	19	EL.	66	.65	134	in. long,	No.	4	to 13	Gauge	1.6	.28
14	16	20		66	.75	134	11	16		Gauge		8.6	.29
14	at	21	- 61	15	.85	134	1.0		15	11		16	.30
14	16.	22	44	66	1.10	134	11	66	16	11		1.0	.32
in. long.	No.		to 12 Gaug	10 11	.36	134	14	1.6	17	4.6		16	.38
11	4.6		to 14 "	16	.38	2	in. long,	No.	3	to 10	Gauge	14	.27
11	16		Gauge	16	.42	2	(1	11			Gauge	1.6	.28
66	16	16		11	.43	2	110	14		Gauge		16	.29
48	46	17	66	44	.46	2	1.5	1.6	15	11		11	.30
1,4	44	18	61	66	.52	2	16	12	16	er		11	.35
64		19		68	.60	214	in. long.	No.			Gauge	11	.27
-14	11	20		34	.70	214	14	11		to 13	7.6	11	.28
14	11	21	66	1.0	.85	214	44	35		Gange		16	.29
in. long,	No.		to 12 Gar	IPA C	.33	21/2	in. long,			- 64		2.6	.26
int road			Gauge		.34	21/2	14	+6.			Gauge	46	.27
**	11	14		5.6	.35	21/2	1.0	11		Gauge			.28
1.6		15			.36	234		44			Gauge	**	.26
101	41	16		1.5	.39	234	in. long,	1.6	11	to 12		44	.27
311	-11	17	61	11	.43	3	in. long,					77	.25
W		18		14	.45	3	in rong,	110.		Gango		11	.26
16	**	19		66		3	11	66	12	nango		3.6	.27
44	116	20	44	66	.56	1000						16	
			to 12 Gas		.67	314	in. long,	MO.		Gauge	Gauge	- 66	.25
in. long,				160	.30	314	11		12	dauge		- 66	
**	11	14	Gauge	**	.31	314							.27
64	11	14		11	.32		in. long,	110,	11	Conne	, usage	10	.25
66		15		16	.88	31/2		W.	11	Gauge	Canas	-	.26
**		16		11	.86	4	in, long,	110.	8	10 16	dauge	11	.25
		17			.40	4		**	11	Gauge			.26

BRIGHT STEEL SCREW EYES, LONG SCREW

No. 114.	per gross	\$1.50	per do:	., .10	No. 110.	per gross,	\$2.50	per dez	15
113.	14	1.50	X X	.10	109.	116	2.80	11	.15
112.	1.4	1.70	(1)	.10	108.	0	3.30	5.1	.20
111.	1.0	2.00	66	.15	106.	66	4.50	0.	.25

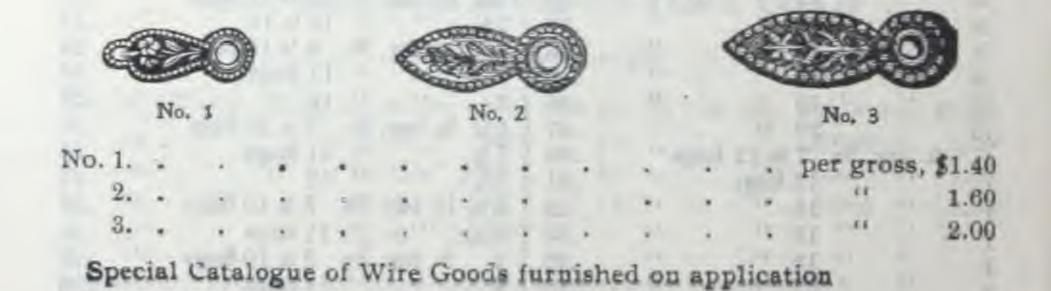
BRIGHT STEEL SCREW EYES, SHORT SCREW

No. 1141/2.	per gross.	\$1.50	per doz.,	.10	No. 1101/2.	per gross,	\$2.50	per doz.,	.15
11352.	-11	1.50	3.6	.10	1091/2.	41	2 80	111	.15
1123/2.	25	1.70	41	.10	1081/2.	6.6	3.30	44	.20
1111/2.	110	2.00	9	.15	1061/2.	2.6	4,50	-KE	.25

BRIGHT STEEL SCREW EYES, SMALL EYES MEDIUM SCREWS

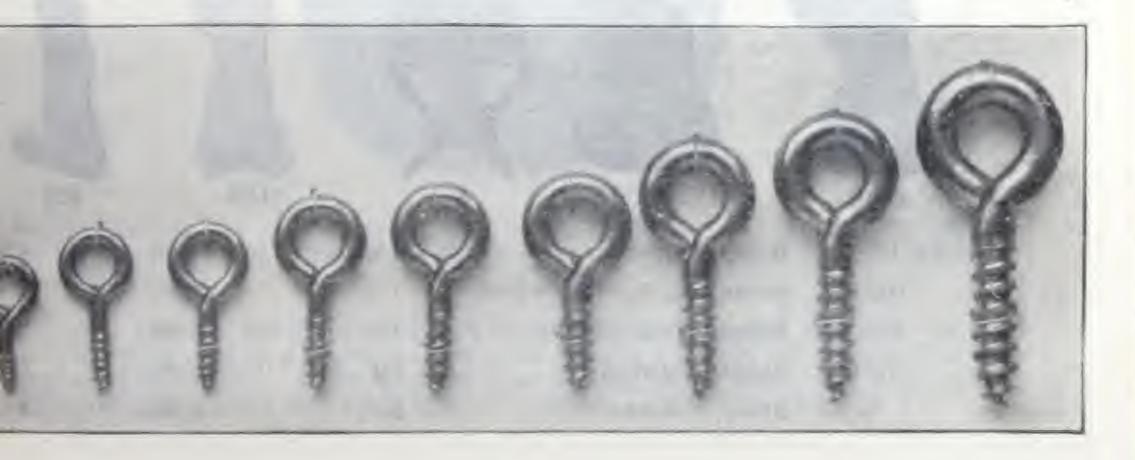
No. 2171/2.	per gross	, \$1.50	per don	., .15	No. 2121/2.	per gross	\$1.70 p	er doz,	.15
21634.	13	1.50	11	.15	211 1/2.	17	2.00	-11	.15
2161/2-	41	1.50	11	.10	2101/2.	46.1	2.50	11	.15
215%.	- 17	1.50	3.5	.10	20954.	19	2.80	114	.15
2143/2.	44	1.50	.0	.10	2081/2.	2.6	3.30	11.1	.20
2131/2.	66	1.50	11	.10	2061/2.	47	4.50	164	.25

BRASS TURN BUTTONS









BRASS PICTURE HOOKS

Will fit any Moulding









No. 0043. Steel, Brass Plated, Plain, Thin, 1¼ in. per gro., \$1.00 per doz., .10 0023S. Steel, Brass Plated, Ribbed 1¾ " 2.00 " .20 023. All Brass, Heavy, Plain, 1¼ " 4.00 " .35 073G. All Brass, Heavy, Figured, 1½ " 4.70 " .40





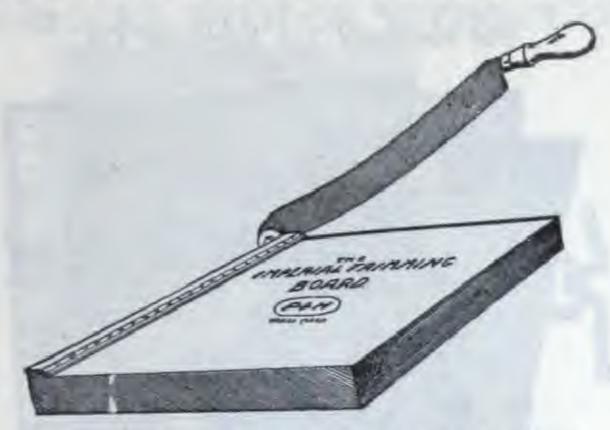






N	Vo. 127.	Brass, Figured,	1¼in.	per gro.,	\$1.60	per doz.,	.15
	043F.	Brass, Plain, Burnished,	11/2	- 11	2.85	110	.25
	022.	Brass, Plain, Heavy,	1%	91	3.00		.30
	073F.	Brass, Figured,	11/4	1972	3.00	18	.30
	5.	Brass, Crown,	2	4.6	6.00	11	.60

IMPERIAL CUTTING BOARDS OR TRIMMERS



No. 1.	Knife,	15	in.	each,	\$10.00	No. 4.	Knife	, 30	in.	each,	\$24.00
2.		20	44	3.8	12.00	5.	11	36	3.6	14	25.00
3.	5.5	24	10	5.6	17.00						

This Board has a heavy, tempered steel knife, and is suitable for cutting card board or other heavy material, such as Mat Boards, etc.

Special sizes made to order

Every Board warranted

FROST & ADAMS CO.'S WATERPROOF APRONS



No. 1.	9×11	2	each,	.25		12×17		each, 40
2.	10×12		14	-30	04.	18×36		1.00
В.	11×14			.35				

These Aprons are reversible; waterproof cloth on one side, rubber on the other, with a seam at the top and a tape within long enough to surround the belt. They protect the clothing from wear and soiling when working over the desk, table or counter. Wear like iron

FROST & ADAMS CO'S PORTFOLIOS

For Architects' and Engineers' Use



PAPER SIDES, CLOTH BACKS AND CORNERS

10×14 inches	9.		each, .55	18×24 inches			each, \$1.15
12×16 "			.60	19 × 25 "	1	40	1.25
14×18 "			.70	22 × 30 · · ·			1.30
16 × 22	-	20		30×40 ···			8.75

PAPER SIDES, LEATHER BACKS AND CORNERS

10×14 inches		each, .75	18×24 inches		each,\$1.	45
12×16 "		.85	19 X 25 "	44	" 1.	65
14×18 "	-	1.20	22 × 30 "		** 1.	50
16 × 22 "	+	1.30	30×40 "	00	* 4.	50

CLOTH SIDES, LEATHER BACKS AND CORNERS, SILK STRINGS

10×14 i	nches,	inside flaps		-	74			each,	\$1.88	plain	. \$1.00
12×16	4.6								2.25	334	1.20
14×18	4.6	16.		+	*				2.63	35	1.50
16×22	416	- 11		-	-			1	3.38	XX	1.90
18×24	4.8	33		-		-			3.75	61	2.25
22×30	- 63	14	-				-		4.50	3.6	2.80
30×40	14.			14	13	-	-	4	7	111	6.00

Made from the Best Bookbinders' Junk Board in the most substantial manner

Larger and irregular sizes made to order, in any style of binding, at short notice

Prices for School Folios, any size, on application

FROST & ADAMS CO'S SOLID BLOCKS, WITH OR WITHOUT COVERS



MADE OF WHATMAN'S 72 POUND PAPER

4½× 5½	inches .	 each, .35	9×12 inches	2	each, 1.00
5 × 7	11	 .40	10×14 "		" 1.35
5%× 9	- 11	.50	12×18 "		1.75
7 ×10	11	.70	14×20 "		2.50

MADE OF WHATMAN'S 90 POUND PAPER

43%	X	51/2	inches, w	ith covers,	each,	\$1.00	without covers,	.40
	X		3.6	THE PERSON NO	3.6	1.10	1 1192 "	.55
534	X	9	16	44	-64	1.30	ii.	.60
7	×		116	**	4.6	1.40	13	.85
9		12	46	44	46	1.75	- 46	1.20
10		14	74	**	55	3.00	11	1.60
12		18	44.	31.	14	3.40	11	2.10
14		20	gi.	**	1.6	4.00	- 11	3.00

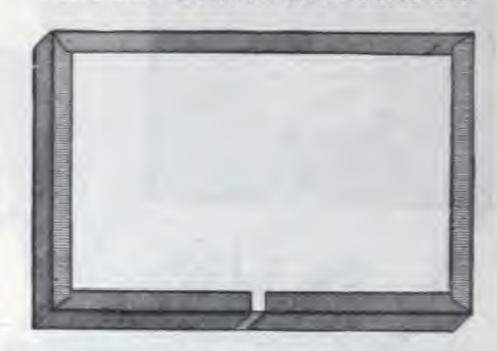
MADE OF WHATMAN'S 140 POUND PAPER

5× 7	inches	, with covers,	each,	\$1.35	without cove	rs, .80
6× 9	11	11	**	1.80	48	1.15
7×10	-11	SOUTH LITT	11 46	2.30	NATADOCAL.	1.40
9×12	96	44	**	3.25		2.25
10×14	188	77	14	4.00	14	2,50
12×18	44	_ **	11.	7.00	- (4	4.25
14×20	X4	16 4	16	8.00	- 11	4.70

Made of Whatmau's Papers in 3 surfaces, H.P. (Smooth), C.P. (Rough)
R. (Extra Rough)

FROST & ADAMS CO.'S ECLIPSE SOLID SKETCH BLOCKS

For Pencil Sketches and School Use



25 SURFACES

5	×	8	in.	per doz.,	\$1.50	each,	.12	9×12 in.	per doz.,	\$3.00	each.	.25
6	×	9						10×14 "	14		44	
7	×	10	6.6	4.4	2.50	n	.20					

Made from High Grade Drawing Paper. Extra heavy back, bound on four sides. Made expressly for College and High School Students

FROST & ADAMS CO.'S SPECIAL WATER COLOR BLOCKS

24 SURFACES

5	× 7 in.	per doz.,	\$3.50	each,	.35	9×12 iu.	per doz.,	\$9.40	each80	
7	× 10 "	11				10×14 "			" 1.00	

Made from 72 lb. paper, C.P. Surface

FROST & ADAMS CO.'S

EXCELSIOR SOLID SKETCH BLOCKS

For Pen and Pencil and Water Color Sketches

24 SURFACES

5	× 7 in.	per doz.,	\$1.25	each,	.10	10×14 in.	per doz.,	\$4.00	each.	.35
7	×10 "	14.	2.00			12×18 "	16	6.00	- 500	.55
9	×12 "	8.6	2.75	a.c	.25	14×20 "	a	7.20		.65

WESTON'S SOLID SKETCH BLOCKS

For Pen and Ink Drawing

5×	7	inches,	24 Surfaces	each,	.25	9×12	inches, 24	Surfaces	each,	.75
0×	9	140	AT.	4.6	.40	10×14	11	11		.95
7×	10	***	81	115	.50	14×20		13	44	1.50

Made of Weston's High Finish, Smooth Paper

SOLID SKETCH BLOCKS, MADE OF GERMAN PAPER

For Pencil

45	£×7i	nches		. 2	each,	.20	7×10 i	nches		each	. 40
5	×8	- 66	+	4.1	10	.25	9×11	1.6		4.0	.65
6	×9	**			16	.30	10×14	10		86	.75

GIBSON'S BRISTOL BOARD BLOCKS

Three Ply Wedding Bristol Boards

7×10 in.	doz.,	\$4.80	each,	.50	10×14 in. doz., \$8.40 each, .75
9×13 "	**	7.20	4.6	.65	12 Surfaces in each

ENGLISH METALLIC PAPER SOLID SKETCH BLOCKS

For Shading and Pencil Sketches

5× 7	inches,	24 Surfaces	each	, .35	10×14 i	nches	, 24 Surfaces	each,	.95
7×10	11	**	44	.55	12×18	1.6	1.6	**	2.00
9×12	11		100	.75	14×20	11	44	- (1	2.75

WINSOR & NEWTON'S

"KENSINGTON" SOLID SKETCH BLOCKS

5× 7 inches	14.		each, .30	9×12 inches		each, .50
7×10 "		1	.40	10×14 "	1	.75

These Blocks, which are made throughout of a high quality paper, specially selected and manufactured for the purpose, present a very agreeable surface for Pen Work, take color well, and will be found practically equal to many of the more expensive makes

FROST & ADAMS CO'S

ENGLISH CRAYON PAPER BLOCKS

5× 7	inches,	Assorted or	Single Tints		14.1	-	1.	each, .45
7×10	11	44	- 1		7	-		.75
10 × 14	43	11	11			1.0	4	" 1.25
14×20	- 0	1.6	5.6		*		9	2.00

These Blocks come in Single and Assorted Tints, please state which is desired

FROST & ADAMS CO'S CHARCOAL PAPER BLOCKS

French Ordinary Paper

9 x 12 inches,	White or	Tinted		- 4				4	each,	.55
12×18 "	- 11	4.6	Grays,	Buffs	and	Blue	S		44	.80

FROST & ADAMS CO'S

FRENCH CHARCOAL PAPER BLOCKS

Lalanne Paper

9×12 inches	, White or	Tinted .				y			each, .65
12×18 "	11	11	1	1	+	8	*	+	.95

FROST & ADAMS CO'S CHARCOAL BLOCKS

Michallet Paper

9×12 inches.	White only			5.		* -	130	each, .65
12×18 "	10	*				(6)		.95

ALLONGE CHARCOAL PAPER BLOCKS

9×12	inches,	Cream	Tint .		-	-		-	each, .80
12×18	716	316		-	1 2		-		" 1.20

FROST & ADAMS CO'S

BLOCKS FOR SKETCHING IN OIL

5× 7 inches	i.	each, .50	9×12 inches	-	each, \$1.25
7×10 "	-	.00	10×14 "	1	" 1.60

Made on the principle of Solid Sketch Blocks. Each block contains twenty-four surfaces of Prepared Oil Sketching Paper

FROST & ADAMS CO.'S CANVAS SKETCH BLOCKS

Containing 12 Sheets

NO. 3 TWILLED CANVAS

9×12 i	nches		 each,	.80	12×18	inches		each, \$1.65
0×14	11	4	 *1	1.20	14×20	**		" 2 00
2×16	- 61	4	 44	1.50	1			

NO. 4 SMOOTH ACADEMY CANVAS

9×12 in	ches .	each, .75	12×18 inches	-	each, \$1.50
0×14	44	1.00	14×20 "		1.80
2×16	44	1.40			

NO. 7 TWILLED SINGLE PRIME CANVAS

9×12 inches		each, .75	12×18 inches		each, \$1.50
10×14 "		" 1.00	14×20 "		1.80
19×16		((1.40			

ENGLISH TOURIST'S SKETCHING BAGS



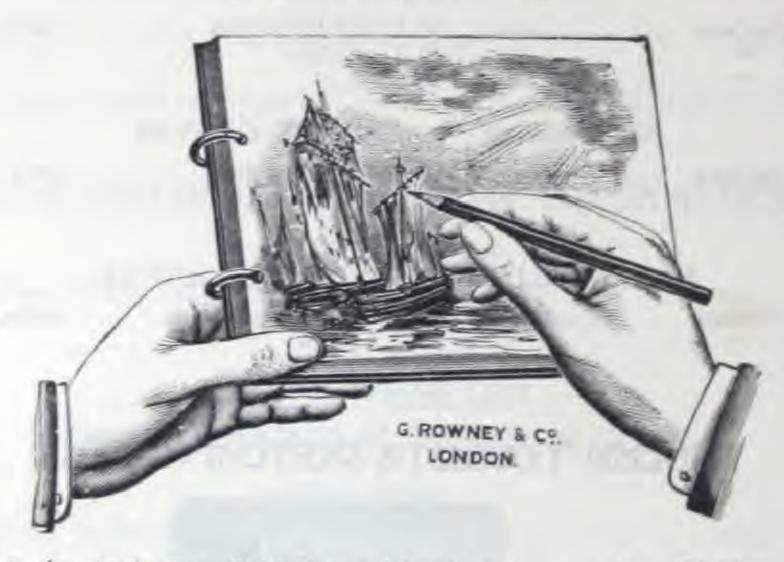
10×12	inches,	without	fittings				each, \$6.00
11×15		**					6.25

Made of Sateen and arranged to hold Sketching Block, Color Box. Water Bottle, Sketch Book, Brush Pouch, etc. Fittings supplied separately

ROWNEY'S PATENT RING BOUND SKETCH BOOKS

MADE OF WHATMAN'S BEST "PERFECT" PAPER

For Water Color Sketches



3 1/2	X	5	in., 30	leaves, Cold	Pressed	Surface		doz	\$4.50	each.	.45
41/2	X	534	61	AF	66	44		11	6.00		.60
		7	44	46	13	11	-	15	7.50	14	.75
51/2	X	9	4.6	44	41	41.		4.6	9.00	16	.90
7	X	10	100	24	6.	9.			13.50	1.6	1.25

MADE OF WHITE CARTRIDGE PAPER

For Pencil Sketches

31	X	5	in.,	30 leaves,	Rough Surface	-		doz.,	\$3.25	each.	.30
4%	X	57%	146	**	18		4	11.	4.25	61	.40
5			16	- 17	11		2	10	5.50	-11	.50
5%			1.0	9.5	- 10			44	6.50	11.5	-80
7			11	16.6	3.6		14	116	8.75	- 11	.80
9	×	12	44	**	1.6	-		4.6	11.00	1.6	1.10

JAPANNED TIN FOLDING PALETTES

For Water Colors

		folded,	12	Divisions		4				each, \$1.20
5×10		32	16	85	2		- 2	+	4	" 1.20
6×12	44	53	18	14		12				1 1.50
7×14	**	44.	24	44						1.75

FROST & ADAMS CO.'S

FRENCH SKETCH BOOKS

White Paper for Pencil or Water Color Sketches, Full Linen Flexible Covers,

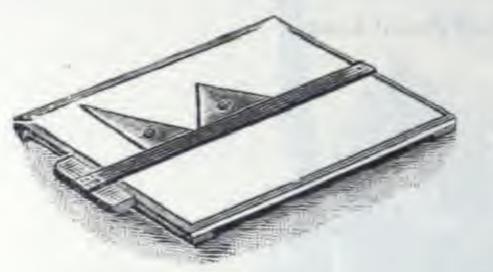
Turned Edges and Pencil Loop



0.	1.	33%	x	5	inches	ng I	100	mail	up.	Region .	doz.	\$1.65	each	, .20
		4			11			1			0	2,15	10	.25
	8.	45%	×	634	11		-		Ţ		- 47-	2.40	i ii	.30
	4.	414	×	73%	XY.	8	+	10			10	2.95	it	.35
	ō.	5%	×	814				- 6		-	1.6	3.20	14	.40

As there have been many inquiries for a book of this description we are put it on the market to supply the want

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No. 1. Size 10×12 in. each, .60 No. 3. Size 17×22 in. each, \$1.50

Drawing Kit contains 1 Drawing Board, 1 T Square, 1 Wood Angle 30°× 60°, 1 Wood Angle 45°.

FROST & ADAMS CO.'S SCHOOL SKETCHING BLOCKS

WHITE PAPER, BOUND ON TOP AND RIGHT EDGES

Size	6× 9 in.	44	Surfaces	4	-			each,	.10
6.6	9× 12 "	22	4.6						

FROST & ADAMS CO.'S

SCHOOL DRAWING TABLETS

WHITE PAPER IN BOOK FORM

Size	9×12 in.	20 Surfaces		1			each.	.10
41	10×14 "	20 " .			-	110	11	.15

FROST & ADAMS CO'S "STUDENT'S" SKETCH BOOKS

White Paper, Stiff Canvas Covers, Stamped on Cover "Sketches"



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2.	51/2	X8	110	**	.25	5.	9	×11	16	11-	.50
3.	6	×9	16	11	.30	6.	10	×14	11	11	.65

FROST & ADAMS CO'S FLEXIBLE LINEN COVER SKETCH BOOKS

A Fine Grain Surface, Very Desirable For Pencil

No. 1.	31/2×51/2	inches	each,	.10	No. 4.	6	×814	inches	each,	.25
	41/2×61/2			1.00	5.				44	
2.00	54×8	2.54	4.6	.20	6.	8%	2×11	4.6	44	.35

GEO. ROWNEY & CO'S CARTRIDGE SKETCH BOOKS

Suitable For Water Color Sketches

No. 1.	5 ×7 inches	each, .45	No. 3. 7	× 10 inches	each, .80
2.	5½×9 "	.60			

FROST & ADAMS CO'S

WATER COLOR SKETCH BOOKS

Of Whatman's Paper, Full Linen Covers

No. 1.	314×5	inches	each,	.35	No. 4.	7×10	inches	each, .85
2.	5 ×7	16	11	.55	5.	9×11½	**	" 1.25
3.	51/2×9	8.6	4.6	.65	6.	10×14	61	" 2.00

ENGLISH METALLIC PAPER SKETCH BOOKS

For Shading and Pencil Sketches. Full Linen Covers

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2.	5×7 "	*			10×14 "		
3.	7×10 "	úc.	.8	35			

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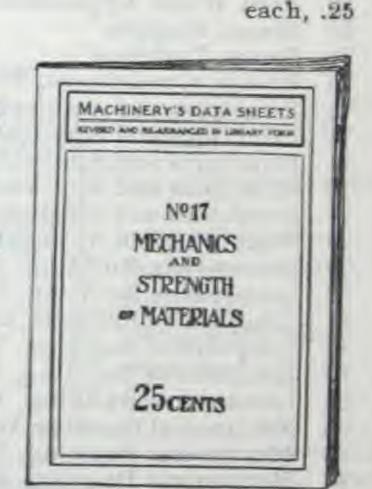
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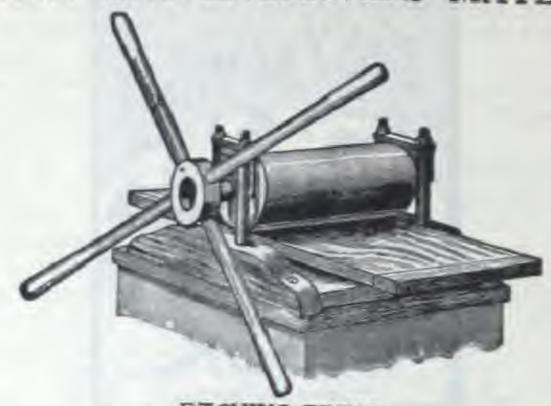
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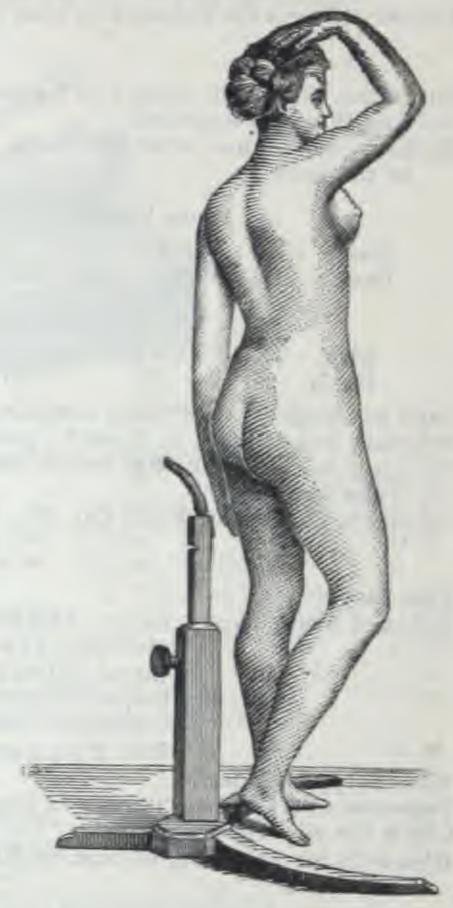
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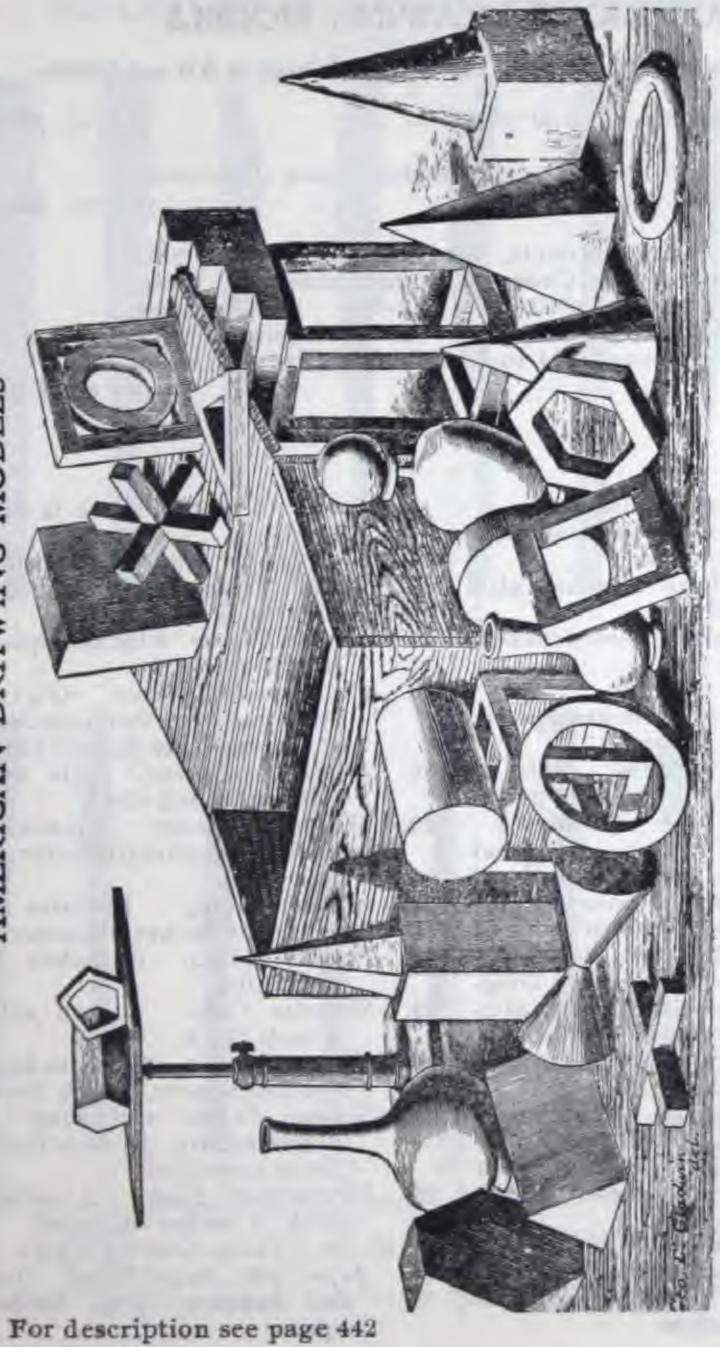




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30. Adjustable Model Stand. Top

and bottom 111/2 inches

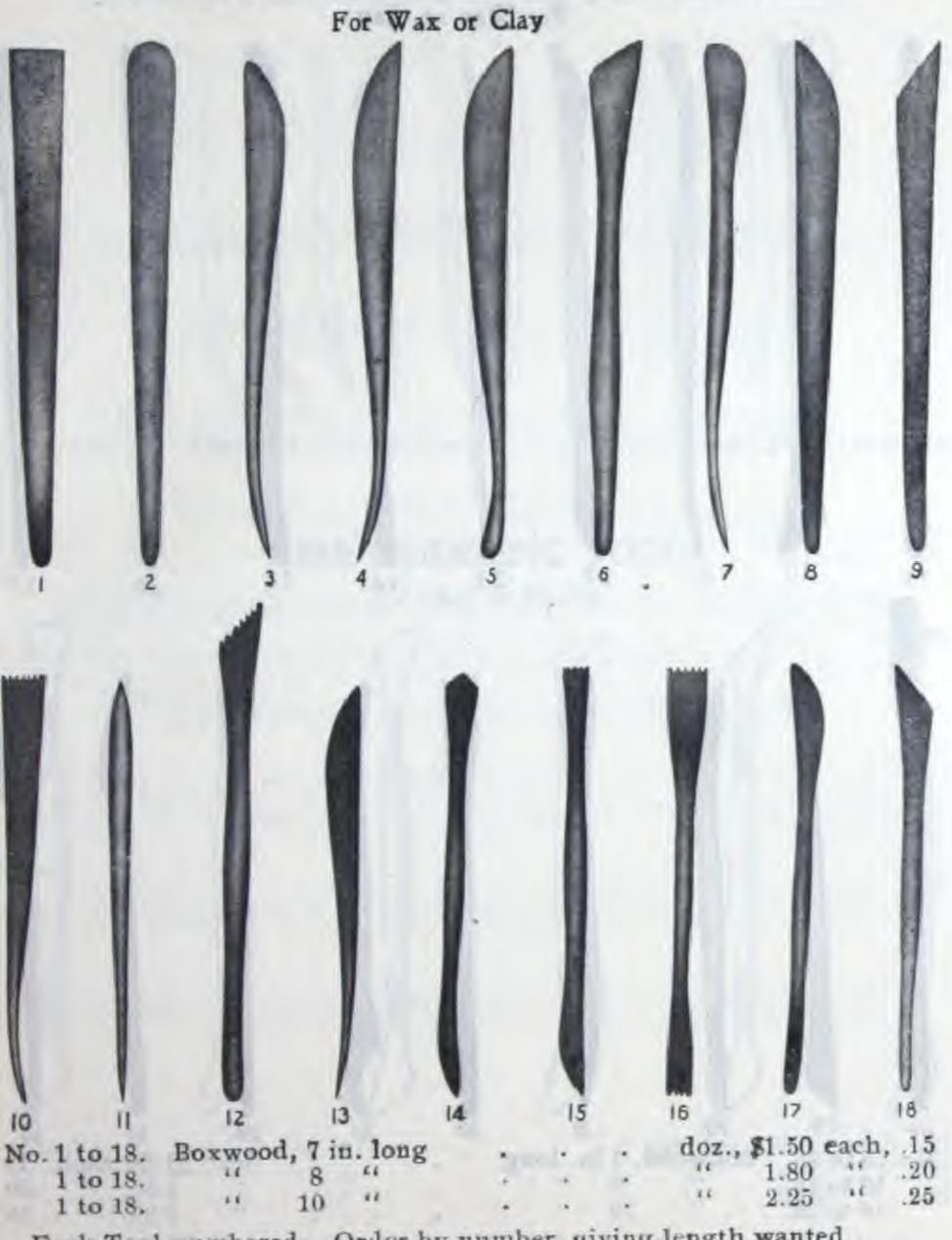
square

For prices see Page No. 441

cones 4 inches

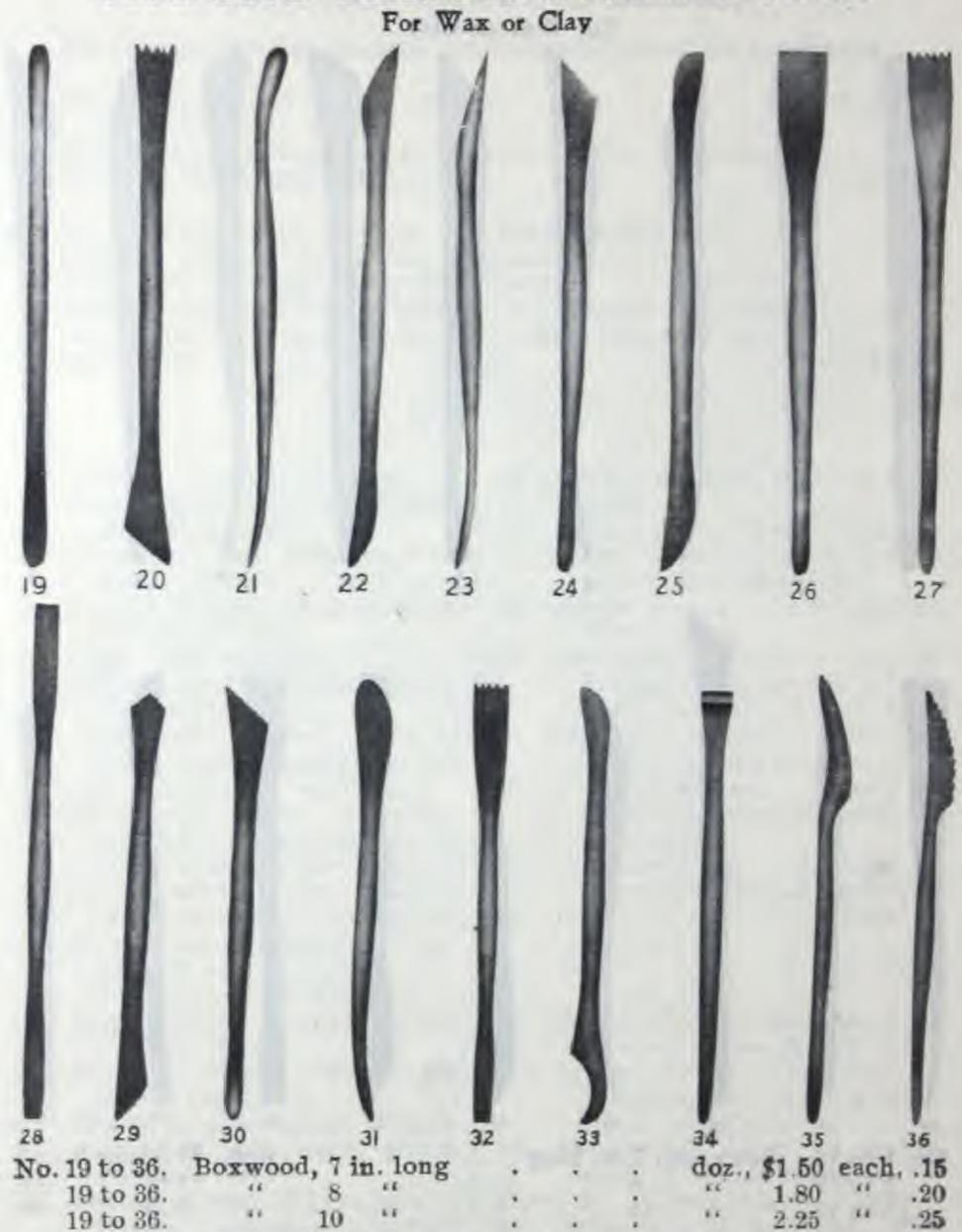
inches, diameter at junction of cones 1 inch, bases of

SCULPTORS' BOXWOOD MODELING TOOLS



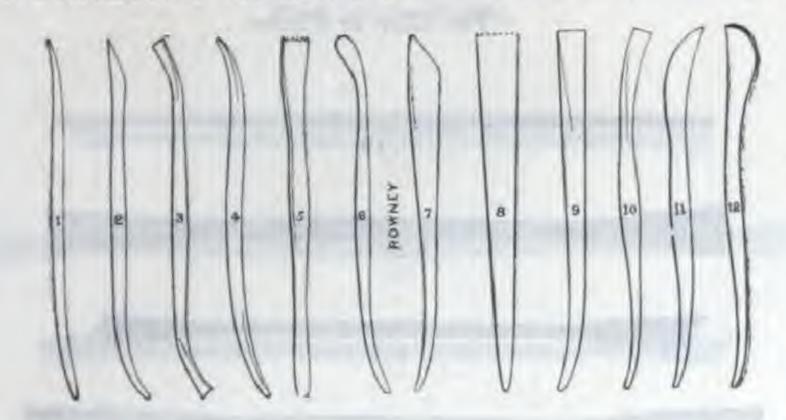
Each Tool numbered. Order by number, giving length wanted

SCULPTORS' BOXWOOD MODELING TOOLS



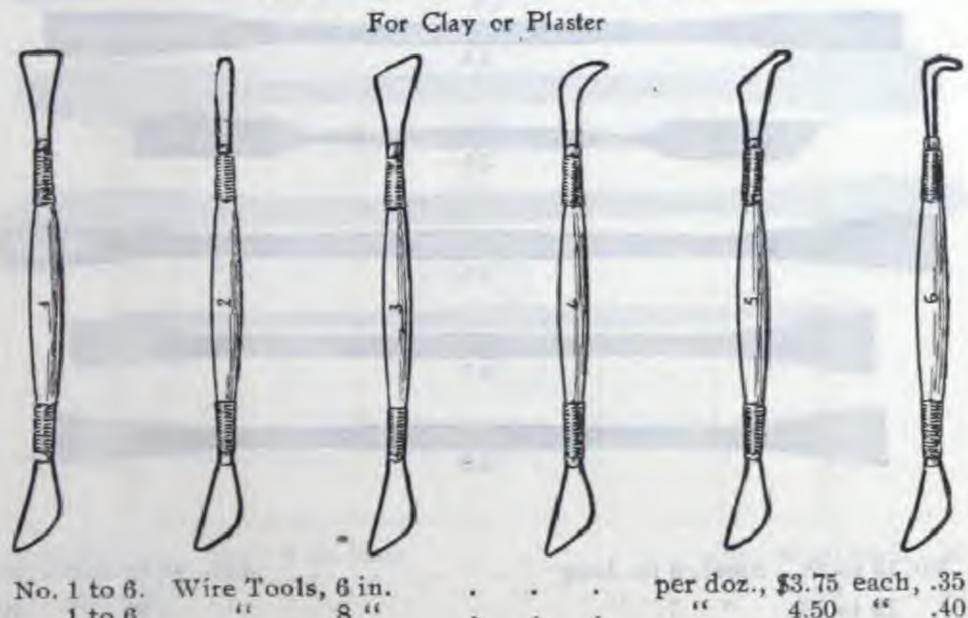
Each tool numbered. Order by number giving length wanted

STUDENTS' BOXWOOD MODELING TOOLS



No. 1 to 12. Assorted, 6 inches long per dozen, \$1.50 each, .15

WIRE MODELING TOOLS



1 to 6. 1 to 6.

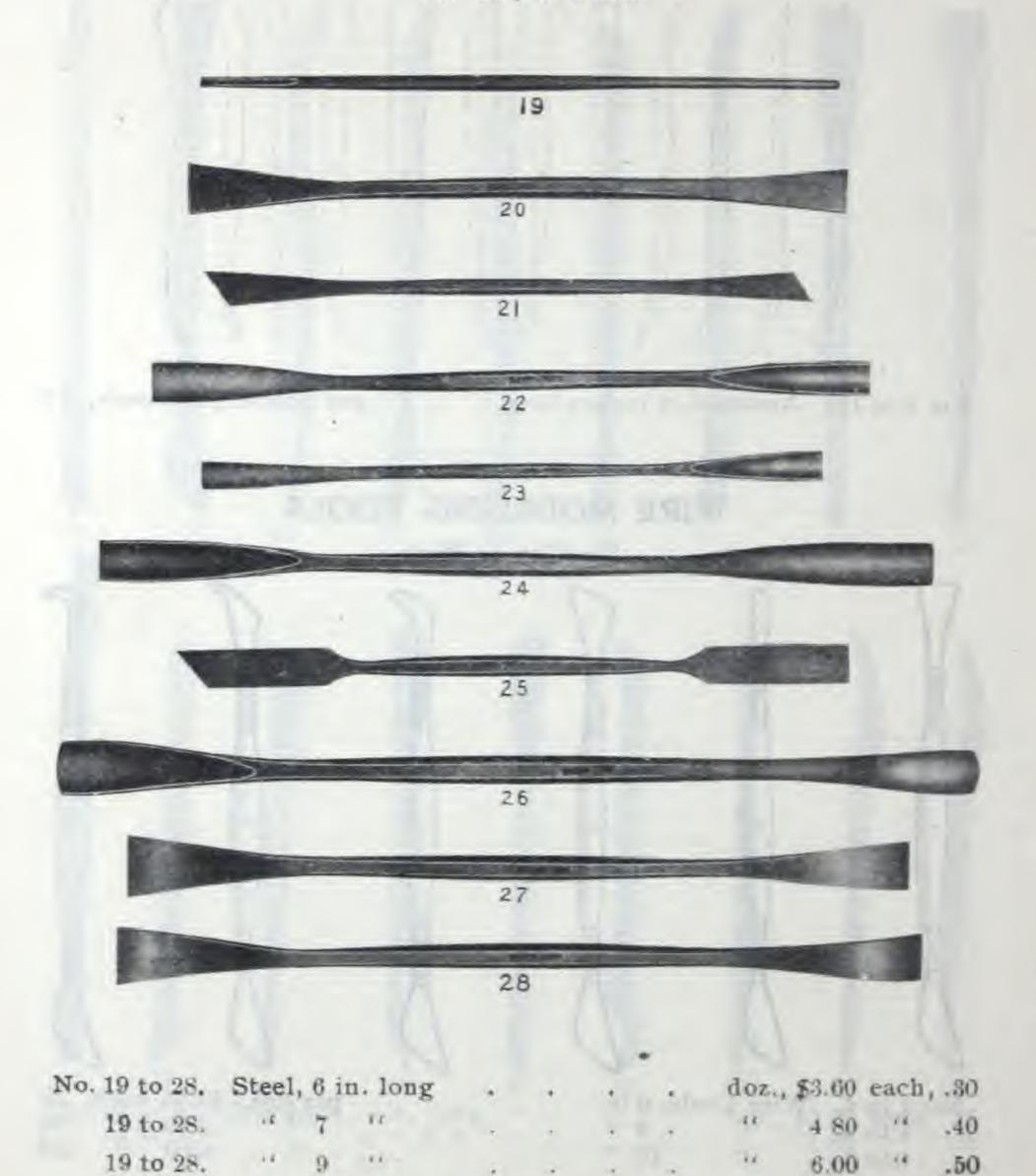
10 "

4.50 ** .40 .50 6.00

Order by Number, giving length wanted

SCULPTORS' STEEL MODELING TOOLS

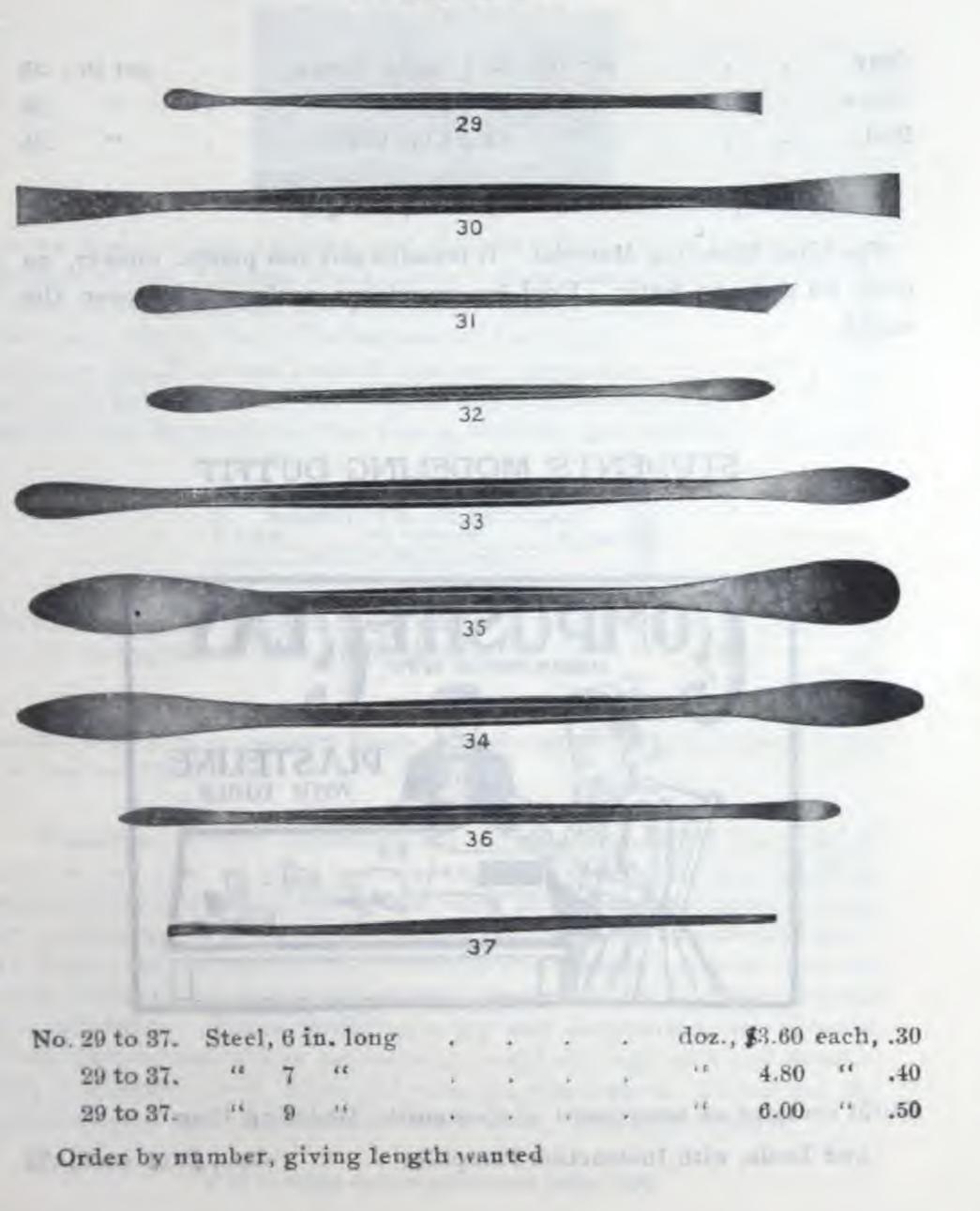
For Clay or Plaster



Order by number, giving length wanted

SCULPTORS' STEEL MODELING TOOLS

For Clay or Plaster



COMPOSITE MODELING CLAY

(Plasteline)

Gray	*		per 1b.,	.35	Light Brown		per 1b., .35	5
Green			43	.35	Dark Brown		.35	
Red			**	.35	Clay Color		" ,35	

Put up in 1 pound boxes and 10 pound packages

The Ideal Modeling Material. It remains soft and plastic forever, no dust, no dirt, no water. Used by prominent sculptors all over the world

STUDENTS' MODELING OUTFIT



Outfit contains an assortment of Composite Modeling Clay and Tools, with Instruction Pamphlet . . doz., \$7.50 each, .75

HARBUTT'S PLASTICINE



Queen Modeler Box, 5 Colors, and Modeling Tool		per box,	.25
Beginners' Box, 5 Colors, Tools, Cards, Lesson Plates, et	c.	11	.50
Universal Box, Material and Tool for the Young Artist		44.	.50
Complete Modeler Box, like Beginners', but larger		- 11	1.00
Designer Box, 5 Colors, Tools, Plates and Accessories		11	1.50
Add-a-Bit Box, The Plasticine Game for any number of per	SOI	is "	1.50
Builder Box, complete, for the Young Architect and Bu	ild	er "	2.50



Re-fill	Packages	for	replenishing bo	oxes			per pkg.,	.25
Re-fill	Packages	for	replenishing bo	es, 1	1b.		TE	.50

Plasticine in bulk for Artists, Sculptors, Schools and other large users, is packed in wooden boxes containing 100 lbs., in rolls of 1 lb., for easy handling

Plasticine entirely overcomes the expense, difficulties and discomforts of wet clay or wax, superceeding the greasy foreign modeling pastes made with animal fats of bad odor; it is clean, absolutely antiseptic and destructive of all germ growth; always remains plastic and ready for instant use; is unaffected by extremes of climate; retains modeled shape without drooping or shrinking. Invaluable for Sculptors, Artists and Architects. Makes Modeling a joy and inspiration for Schools, Kindergartens and Home Amusement; awakens ingenuity and wonderfully developes artistic sense and accurate observation. It has not the mussiness and general unsuitableness of clay. No water required

For further description see page 448b

Harbutt's Plasticine — continued THE BUILDER



By this, the newest and most delightful box, models of real houses, castles, churches, etc., can be built in just the same way as the work man builds, brick by brick, in a realistic manner. Bricks made by the little brick making machine and roofing tiles stamped with apparatus in the box. Complete with all requisities and full instructions. Several can play with this box

at once. Unlike wood bricks that tumble about, the model is permanent

THE ADD-A-BIT

A wonderfully interesting game which provides an unending source of real fun and enjoyment for Home and Social Gatherings. Young and old are interested and amused, something for all to do, and the fun and fascination of the game centres round its "unexpectedness." A constant succession of surprises



DESCRIPTION OF THE PROPERTY OF

THE DESIGNER

The Designer is the box pre-eminently for the young art student. It assists in the production of original patterns and is helpful in Home Arts and Crafts, woodcarving, repousse work, stencil and inlay

decoration, embroidery,

etc. The metal cutters start the young designer right away on practical work

THE COMPLETE MODELER

The oldest and most universally useful of the series for general work; a good supply of Plasticine and Tools



For Prices see page 448a

SHEET WAX

hite				per pkg.,	.15	Purple per	pkg.	, .15
reen	*			**	.15	Varigated	11.	.15
nk				16	.15	Red, Plain or Varigated	11	.25
ellow	16	*	3	16	.15	Scarlet, Plain or Varigated	65	.25
ue				6.6	.15	Pond Lily, White & Green	16	,25
a Ros	se			-te	.15	Double Thick White		.25

Our Wax is warranted the best in the market. Each Package conins 12 sheets, excepting the Pond Lily

The Pond Lily is double the size and thickness of Single Wax, and is itable for making Wax Crosses, Pond Lilies, etc. Each package ntains 6 sheets

PLASTELINA

Is now used and recommended by the most renowned sculptors of the nited States as the best modeling material, and has been adopted in any schools of art and sculpture. It does not contain any clay or wax, ses not stick, requires no sprinkling, and will retain its plastic qualities all weathers and any length of time

ght Brown, Dark Brown, Terra Cotta, Grayish Green, Bronze
Green per 1b., .35

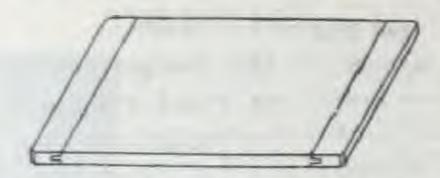
MODELING CLAY

Bricks, 5 or 10 pounds per 1b., .06

FROST & ADAMS CO.'S MODELING WAX

ed, Green, Light Gray, Dark Gray, Maroon, Brown, Buff,
Scarlet, in half-pound blocks per lb., \$1.00

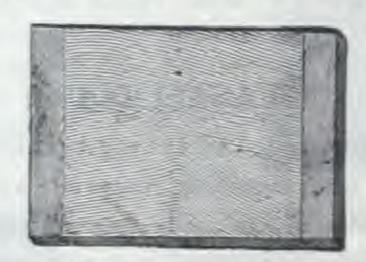
FROST & ADAMS CO.'S DRAWING BOARDS



12×16	in.,	Quarter Imperial,	56	in.	thick,	First (Quality			each	1, .75
14×18		Half Royal,	38	KC	48	3.6			-	11	.95
17×23	11	Half Imperial,	56	11	16	5.5		-		116	1.10
19×25		Royal,	54	16	24	31		1		11	1.20
23×31	36	Imperial,	76	40	44	16				46	
28×41	40	Double Elephant,	7/8	20	16	re	0		1	5.0	2.50

Pinewood Drawing Boards, with hardwood end cleats tongued and grooved, both sides flat, Shellac finished for use

FROST & ADAMS CO.'S DRAWING BOARDS



12×16 in., Quarter Imperial, 14×18 " Half Royal,	56 56	in.	thick,	Second	Quality	each,	.60
17×23 " Half Imperial,	38	11	3.6	6.6		**	90
19×25 " Royal,	58	A.C.	TC.	4.6		46	1.00
23×31 "Imperial,	76	16	111	- 15		- 44	1.25
28×41 " Double Elephant,	78	5.6	46	41		56	2.00

Pinewood Drawing Boards have end cleats tongued and grooved, both sides flat, finished for use

F. & A. Co.'s Drawing Boards are the best that can be produced. They are of thoroughly seasoned, selected, narrow strips of pinewood. Boards can be made for much less money, if other than thoroughly seasoned woods are employed, the strips less carefully selected and matched and less attention paid to the finish

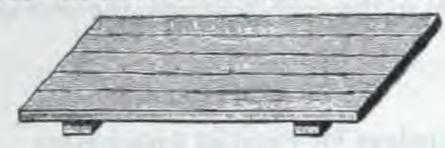
We shall be pleased to answer inquiries relating to Larger Drawing Boards

FROST & ADAMS CO.'S SPECIAL LARGE PLAIN DRAWING BOARDS

1×42		34	10.	thick,	First Quality		4	1 10	. 61		each,	The second second
6×48		24		187			100		160			6.00
0×60	64	34	5.4	3.0	40	4					4.6	15.00
2×72	66	1	61	245	1000					100	31	18.00

Pinewood Drawing Boards with hardwood end cleats, flush both sides.

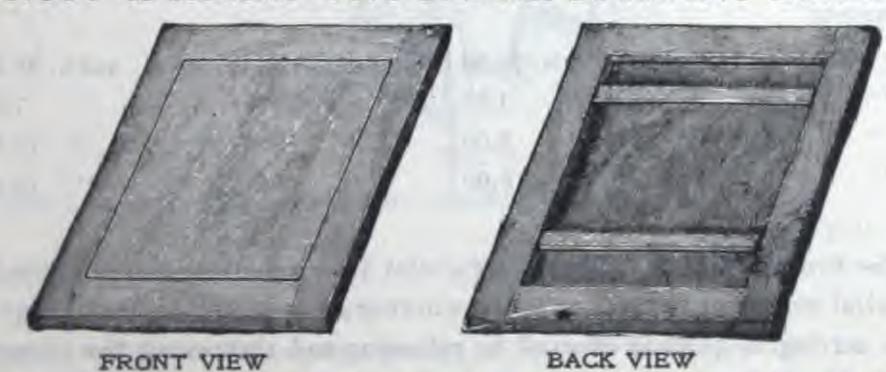
FROST & ADAMS CO.'S SPECIAL LARGE DRAWING BOARDS



1×42	in.,	3/4	în.	thick,	First Quali	ty		*	each,	4.50
6×48	11	34	1.6	46	14				4.4	11.50
0×60		34	11	-66	1.6	145			- 11	16.50
2×72		134	8.6	**	- 66	1			44	22.00

Pinewood Drawing Boards, hardwood cleats attached by screws sunk n slots bushed with metal, to allow contraction or expansion, We hall be pleased to answer inquiries relating to Larger Drawing Boards

FROST & ADAMS CO.'S FRAME DRAWING BOARDS



12	×17	inches		AND .		-		VE			175	each, \$3.00
18	× 22 1/2	44	-	2	100	7		100	11.8	100		4.00
	× 28 1/2						1.7		U 3	1		1, 5.00

The frames of the above Boards are made of hard wood, the panels of pine, all from thoroughly seasoned stock

FROST & ADAMS CO.'S PARALLEL ATTACHMENT

For Drawing Boards and Tables

Fixtures for Parallel Attachment (except straightedge)

For Boards 1 in. thick perset, \$3.00 For Boards 1 1/2 in. thick perset, \$3.50 For Boards 1 1/2 in. thick " 3.75

The fixtures consist of 2 double and 2 single pulleys, one of which is adjustable for tension of the cord, 2 clamps, the cord and the straightedge

STRAIGHTEDGES

Hardwood Straightedges for Parallel Attachment

For Boar	rds 26 i	n, long	eacl	h, .60	For Bo	ard	s 72 i	n. long	each,	\$2.75
16	31	10	*1	.75	116		84	11.	10	3.75
11.	42	- 11	64	1.25	14.6		96	44	115	4.50
11	55	44	41	2.00	-11	-	108	11.	111	5.00
44	60	46	14	2.25	10		120	11.	46	6.50

Maple Straightedges, celluloid lined, (transparent) for Parallel Attachment

For Boar	ds 26 i	n. long	each	, \$1.50	For Boa	rds 60 i	n. long	each	, \$6.25
11	31	11	11	1.75	16	72	u	44	7.50
10	42	44	**	3.00	14	84	-66	- 66	10.00
11	55	H.	**	5.00	- 16	96	100	116	14.00

The Frost & Adams Company's Parallel Attachment insures absolutely parallel motion of the straightedge, whether set horizontal or at an angle. The setting is quickly effected by releasing and tightening the clamps which hold the straightedge to the board. In the same way the straightedge can readily be removed when a T square is to be used on the board. The attachment can be applied without other directions to any board having ledges or available space underneath

TRESTLES FOR DRAWING BOARDS



Pinewood Trestles, 37 in. high, 38 in. long, 30 1/2 in. spread each, \$5.60

WHITEWOOD HORSES

2550.



THE "CENTURY" ADJUSTABLE STEEL DRAUGHTING TABLE



THE "CENTURY" OPEN

No	1	ame	Size of Board Inches	Stand Including Board	Stand Without Board	Parallel St. Edge Complete	Adjustable Tray	Roller Curtain Covers
10	Student	Special		\$6.50	\$6.00		\$2.50	
* A	Century	Leader	27×27	7.50	6.00	\$4.50	2.50	\$2.75
B	Century	Leader	27×27	7.50	6.00	4.50	2.50	2.75
1	Century	Standard	28×32	9.00	7.00	4.50	2.50	3.00
2	11	44	30 × 36	10.00	7.00	4.75	2.50	3.50
3	36	41	32×42	15.00	10.00	5.00	2.50	4.00
4		X4	37×48	18.00	11.00	5.50	2.50	4.50
5	8.6	17:	37×60	25,00	14.00	6.00	2.50	5.50
6	10	111	42×60	28.00	16.00	6.00	2.50	5.75
7	1.6	11	42×72	32.00	18.00	6.75	2.50	6.50
8	41	1.6	48 × 72	36.00	20.00	6.75	2.50	7.00
9	44	1.6	48×96	44.00	24.00	7.50	2.50	9.00
10	11	14	48×120	54.00	30.00	10.00	2.50	12.00

The "Century" Adjustable Steel Draughting Table-continued

CENTURY CONSTRUCTION

Remember "It Don't Wobble"

Our construction throughout is of strictly new and approved design, manufactured to withstand both use and abuse, mechanically perfect. Absolutely rigid.

We use Michigan White Pine for our No. 3 Table and larger sizes.

The smaller tables have bass wood boards

It has a wider range of adjustment than any other table made. All tables are provided with at least 20 inches vertical adjustment, for either sitting or standing position. The top may be placed at any desired angle from horizontal to vertical

All adjustments made instantly by the simple action of thumbnuts, which when clamped hold the board perfectly tight



THE "CENTURY" FOLDED

When desired, any of these tables can be quickly and easily folded up, as illustrated, for transporting from place to place or storing away. It is shipped in this condition and being received in one complete piece, requires only to be opened up for erection. The base is unbreakable and is good for a hundred years

GUARANTEE

We guarantee all articles to be as herein represented. Workmanship and material the best possible to obtain

If not as represented, return the table to us at our expense and your money will be refunded

PAASCHE EASEL AND DRAWING TABLE



Drawing Table without revolving top (otherwise the same), is not convertible to easel and vice versa. By unscrewing the top it can be changed

for either easel or drawing table

The only Easel and Drawing Table with revolving, tilting, raising lowering and turning top and all movements working friction tight, permitting the top to be placed in any position whatsoever without getting up from the chair or loosening and tightening any bolts or nuts. It is a model of simplicity, and the most ideal Easel and Drawing Table for artists, photographers, designers, draftsmen, illustrators, architects, sign painters, letterers, card writers, etc., indispensable and the most practical for their requirements. Positively rigid in any position

The entire stand, except the top, is of metal, with four adjustments, as follows: 1. For tilting top in any angle from horizontal to beyond vertical; 2. Wing nut and (No. 3 lock nut) for obtaining any desired tension of revolving top; 4. For turning top around without moving stand; 5. For

raising or lowering the top for sitting or standing position

The top is of well seasoned soft pine, with hard wood ends, perfectly true and square and cannot warp, making it very suitable for the use of thumb tacks. Different size tops can be attached very quickly.

FROST & ADAMS CO.'S CHAMPION DRAWING TABLE



No. 1.	Top	32×	42	inches		+	÷			 each	\$12.00
2.	44	37×	48	11				4	- 60	+ 6	16.00
3.	116	37×	60	66						11	20.00
4.	16	40×	72	16	-			4		44	24.00
5.	**	40×	84	44	2					44	28.50
6.	16	42×	96	AT						0	35.00
7.	16.6	48×	120	45			19			11	40.00

EXTRA PIECES FOR THE CHAMPION TABLE

Foot Rest			*						each,	\$1.50
Swing Tray				4	*				16	2.00
Drawer and	Swin	ng Tr	ay	,		1		4	14	3.00

This Table is a new design, and we consider it perfect in every particular. It can be raised and lowered from 32 to 40 inches. The raising, lowering and tilting is done by means of hand wheels on the right side, and when tightened the table is very rigid. This is accomplished by rods running the full length of the frame. It has a soft wood top, and is well manufactured

which are it was to be a supplementation of the property of th

ALEXANDER DRAWING TABLES

No. 1.	32 X	42	inches				each,	STYLE A \$15.00	STYLE B \$25.00	\$17LE C \$33.00
2.	37 X	48	- 16	2		4	4.6	20.00	30.00	38.00
3.	37×	60	1.6				44	25.00	35.00	43.00
4.	40×	72	4.8		*	4	57	30.00	40.00	48.00
5.	40×	84	10	4	9	- 1	11	35.00	45.00	53.00
6.	42 ×	96	44				66	40.00	50.00	58.00
7.	48×	120	14			1.6	**	45.00	55,00	63,00

By adding to or deducting from the above styles the several conveniences, a table may be made to suit all requirements, as follows:

Foot Rest	each,	\$1.50	Cabinet, 12×16×20, 3	
Circular Swing Tray	16.	2.00	drawers .	each, \$8.00
Drawer and Swing Tray		3.00		



STYLE A. SIZE 1

Style A Tables are suitable for work requiring the draughtsman to work from one side only, are adjustable for height and can be placed at any incline. They make a satisfactory table at a low price. We recommend these for schools and colleges

These Tables are rigid and firm in all positions and the adjustments are simply and quickly made. The tops are finished drawing boards and constructed in the best possible manner, allowance being made for contraction and expansion. Balance of the wood work is of oak and nicely finished. The frames are black enameled with bronze trimmings

Alexander Drawing Tables - Continued



STYLE B. SIZE 2

Style B Tables are complete with Foot Rest, Swing Instrument Drawer and Sketch Box, and have adjustment for inclining to either side; the top can be raised, as shown in cut, without raising frame. They are suitable for sketch work, perspective and careful work.



STYLE B. SIZE 2

For prices see page 454

Alexander Drawing Tables - continued



STYLE B. SIZE 4

The above shows the construction of the frame in the larger tables.

All sizes in any style above No. 2 are so made and while they are adjusted in the same manner, give all the strength and firmness of the smaller sizes. They are especially adapted for the work of engineers, map makers and for large detail work

For prices see page 454

Alexander Drawing Tables - continued



STYLE C. SIZE 1

Style C Table, combining as it does all the advantages of the B Table, with a cabinet or case in the rear of the frame, makes a most complete office or home fixture. The cabinet may be varied in size and shape to suit the individual; Drawers to pull from either or both ends or the rear



This cut represents the tables folded, to set one side when not in use, which is a great convenience. For prices see page 454

Alexander Drawing Tables - continued



Cabinet of 4 Drawers 81/2 x 19, 31/2 inches deep



For prices see page 454

FRY'S PATENT DRAUGHTING TABLE

For Architects, Engineers and Draughtsmen

FROST & ADAMS CO., NEW ENGLAND AGENTS



TABLE FOLDED

No. 1.	24×32 i	nche	s, 30 inc	hes high	10		4	each,	\$4.50
2.	32×42	11	38	110				116	6.00
3.	37×48	ii	38	11				+4	8.00

All Tables have Hardwood Base and Pine Top. Special size made to order

Finding call for a light, adjustable Table, we are prepared to furnish the above Tables of any size, for use either as a drawing or reference Table; well braced and substantially made. Can be folded and moved without inconvenience

Fry's Patent Draughting Table - continued



24 × 3	0 inches		4	100					-	esch.	\$12.00
36	with Drawer 4×	10 3	nches		-	-			-	0	13.50
	with Cabinet of	4 D	rawers	, 4×	10 i	nches	and	Tray	4	4.6	17.00



24×30 inches, Drawer 4×10 inches .

each, \$20.00

PATENT ADJUSTABLE DRAWING TABLE



239.	Drawing Table, Plain, Soft Wood Top, 21×24 inches,		
	SHOPS, CIC.	ach,	\$10.00
240.	Drawing Table same as No. 239, with Instrument Shelf 7×24 inches, Iron Stand, no Drawers	12	11.50
241.	Drawing Table, Black Walnut Top, 22×26 inches, In- strument Shelf 7×26 inches, Iron Stand, no Drawers	18	12.50
242.	Drawing Table, Black Walnut Top, 22 × 26 inches, Instrument Shelf 7 × 26 inches, 2 Instrument Drawers,		
	Ornamented Stand Mounted on Casters	4	15.00
243.	Same as No. 242, with extended Lever for adjusting in-	11	16.25
244.	Same as No. 242, Top of Selected, Polished Walnut Iron Stand, Bronzed and tastefully ornamented	-	18.75
111/2	m: make is designed for Draughtsmen and Ar	tisan	s gen-

Note.—This Table is designed for Draughtsmen and Artisans generally. It can be raised to any convenient height, either for sitting or standing; and can be readily fixed at any desired inclination, while the Instrument Shelf and Drawers will always remain level. The top can be allowed to rotate, if desired, or be firmly fastened

THE "SELDIS" DRAWING TABLE

For Mechanical Draughtsmen, Architects and Artists



Seldis Drawing Table . Drawing Board separate price, according to size

each, \$15.00

ADVANTAGES

1. The Draughtsman can work in a natural position at all times, no matter the size of drawing or part of Board he desires to work

2. Table and Board being separate, any number of Boards can be used 3. No matter the position of the draughtsman, the Swing Frame

always holds the centre of gravity within the base, therefore, no tipping of the table could occur

4. The harder the strain the more securely locked and, therefore, the more stable

5. Every motion self-locking

6. If not in use can be folded into very small compass

7. By drawing out the eight wooden wedges it can be packed directly on the Drawing Board, as no part exceeds the length of the board

8. Each Table has a Drawer

9. Being adjustable to any angle adapts it for either technical or freehand drawing

10. Being adjustable in height, adapts it for any size men or women In its lowest position, with the board, it is an excellent writing desk

FROM THOMPSON-HOUSTON ELECTRIC CO.

MR. OSCAR SELDIS:

DEAR SIR! - I have been using a number of your Drawing Tables in my department now for more than a year, and they give satisfaction; in fact, I have at present more than ninety of them in use, and I do not remember a single complaint concerning them. I have no hesitation in saying I think them the best Drawing Tables I ever saw

Yours Respectfully M. O. WAKEFIELD

Chief Draughtsman, T.-H. Electric Co. Since the above was written, the number in use in the T.-H. Electric Co. has been increased to the vicinity of 150 Tables

THE NORMAL ADJUSTABLE DRAWING TABLE



23×31	inches,	7/8	inch	pine wo	bod					each.	\$ 8.75
27×34	10	7/8	0	44						4.0	10.00
31×42	85.	7/8	16	11						4.6	11.25
33×55	- 616	7/8	**	6.6						116	17.50
36×48	- 11	7/8	3.5	- 0			-		2	11	16.50
42×60	15	178	4.1	11	*			*		**	20.00

The Normal Adjustable Drawing Table can be raised, lowered or set at an inclination instantly by loosening the nut of the central rod, which moves in slots of the legs, as readily seen from the illustration

The Drawing Board can be detached and the trestle folded up, occupying little more space than an ordinary Drawing Board, a great advantage
if the table is not used constantly, as it can be put out of the way or set
up in a few minutes. Trestles are made of ash wood, fine shellac finish:
Drawing Boards are made of clear, well seasoned pine

DRAUGHTING TABLE TOPS

32 × 42 inches	each, \$8.00	37×60 inches . each, \$10.	.00
37 × 48 "	9.00	Larger Sizes made to order	

Our Table Tops are finished with cherry edge put on by our improved method, and hardwood ledges on the back, allowance being made for all contraction and expansion, finished, ready to put on frame

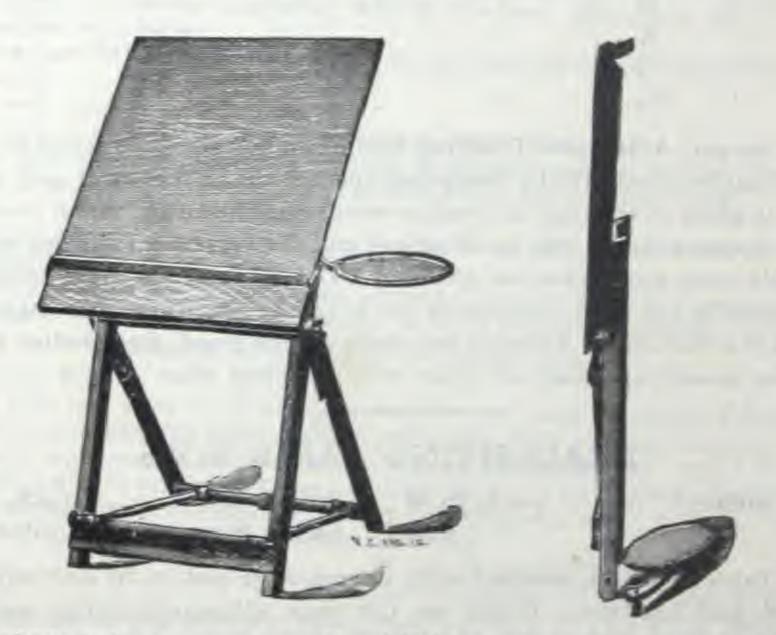
PATENTED ADJUSTABLE FOLDING TABLES

For the Use of Architects and Artists. Also Drawing, Sewing and Card Tables



22×36 inches . . each, \$5.00

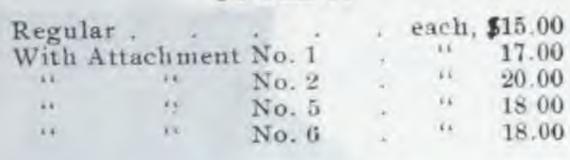
These Tables are firm in any position and are specially designed for artist's use, for oil, water color and china work. Finely finished in oak, oil rubbed, with nickel plated trimmings. The adjustments are made easily and quickly by means of the thumb screw at the side of the frame. The tray can be swung under the top or detached at will; the sliding shelf may be placed at any height or out of the way at the top of the table. These tables are carefully constructed and finished and make a fine piece of furniture for studio or home



The above cuts represent our Easel Tables, adjusted for use, and folded

MORSE DRAWING TABLES

STYLE A



Size of Top, Hardwood, 24×26 inches
Pine, 24×32 inches
Drawer, 7½×10 inches, 3 inches deep
Vertical Adjustment from 32 to 42 inches

Weight, boxed, 100 pounds, Compensating Spring, Polished Brass Upright, Enameled Iron Work, Nickel Plated Trimmings

DESCRIPTION OF SPECIAL ATTACHMENTS

No. 1 is a Tray, as used on Style A, 6×26 inches; as used on Style B, 3×36 inches; as used on Style B, 3×36

No. 2 is a Tray, 12×14 inches, which swigns from top of drawers with flexible band for glass of water; will swing in front of board when top is inclined each, \$3.00

No. 3 is a Two-drawer Cabinet. Drawers measure 13 × 26 in., inside. Top drawer 11/4 in., bottom drawer, 21/2 in. deep each, \$4 00

No. 4 has Drawer 7½×10 inches, 3½ inches deep, with tray top swinging on an iron arm . . . each, \$3.00

No. 5 is a Tray swinging on an iron arm No. 6 is an Instrument Shelf at top of board, always remaining horizontal

STYLE A



SHOWING DIFFERENT POSITIONS OF STYLE A

Morse Drawing Tables - continued



STYLE B. POSITION 3

Regular	77			\$24.00	WithA	ttachmer	t No. 4	each	\$27.00
WithAtta	chme	ent No. 1	B. 33	26.00	AV	41	No. 5	46	27.00
11	4.8	No. 2	5.0	29.00	13	11	No. 6	46	27.00
ii	11	No. 3	60	32.00					21.00

Weight Boxed 100 lbs

Size of Top, Hardwood, 30 × 36 inches

Pine, 30×42 inches

Drawer, 71/2 × 10 inches, 31/2 inches deep

Vertical Adjustment from 32 to 42 inches

Compensating Spring, Polished Brass Upright, Enameled Iron Work, Nickel Plated Trimmings

For Description of Attachments see page 465





Morse Drawing Tables - continued



STYLE C

							Stand only		With Top
36×	48	in.	Pine Top :	and 2-draw	er Cabinet	each,	\$35.00	each	, \$43.00
36×	54	110	10	11	41	10	36.00	11	45.00
36×	60	**			- 44	**	37.00	(5)	48.00
36×	72	4	10	0	ix	16	39.00	-6.6	53.00
42×	60	11	X9.	- 0	ii ii	te	37.00	93	51.00
42×	72	x.i	11	14	10	40	39.00	(4)	55.00
42×	84	32	31	16	iii.		41.00	11	61.00
42×	96	4.4	44	11	ii	36	43.00	9.6	65.00
48×	72	44	**	ke.	ti	10	39.00	1 10	59.00
48×	84	XE.	4.6	11	.11	14	41.00	99	63.00
48×	96	55	66	4.6	ei	48	43.00	74	69.00
48×1	108	35	**	21	**	. 23	45.00	10	77.00
48×	120	4.5	¢;	11	4	X4-	47.00	11	85.00
54×	120	11		xe	110	26	47.00	92	89.00
54×	144	44	14	10	(1)	16	50.00	1.0	100.00

Morse Drawing Tables - continued

ATTACHMENTS

To add to the efficiency of our Drawing Tables we make a line of special attachments consisting of various styles of trays and drawers. In many cases these attachments can be used in combination, the one chosen depending on the style of table and the requirements of work. The construction and finish of these attachments is the same as those of the tables.

No. 2 is a tray 12×14 in., pivoted on the corner of a drawer 7½×13×3½ in. On one corner of the tray is a metal water-glass holder . . . each, \$4.00



No. 3 is a cabinet with 2 drawers 13×25 in. inside, 1¼ and 2½ in. deep, which pulls out from either end each, \$7.00



No. 4 is a drawer 7½×13×3½ in. with a tray top. It is attached by a swinging arm on which it revolves. . . each, \$3.50



ROCHESTER DOUBLE COLUMN TABLE, STYLE G



STYLE G

Тор									Stand only		With Top
36× 48	inches		14.					each,	\$25.00	each,	\$33.00
36× 54	11							416	25.50	66	34.50
36× 60	436					4		11	26.00	11	37.00
36× 72	EI			*	2	-		33	27.00	11	41.00
42× 60	110		- 2	4				4.4	26.00	11	40 00
42× 72	**	5.		-	4		4	4.6	27.00	16	43.00
42× 84	16		31	1		4		44	28.00	- 11	48.00
42× 96	47		-	0	4			24	29.00	44	51.00
18× 72	11	à	-					11	27.00	114	47.00
48× 84	11	4				-		86	28.00	47	50.00
48× 96	. 64			3				44	29.00	4.6	55.00
48×108	11							110	30.00	14	62.00
48×120	**	4		4				11	31.00	99	69.00
54×120	16	4				+		. 46	31.00	10	73.00
54×144								11	33.00	**	83.00

Style G will accommodate Tops from 36×48 in. to 60×144 in. Has Tilting Movement only; otherwise like style C

ROCHESTER DOUBLE COLUMN TABLE, STYLE A.C.



STYLE A. C.

No. A.C. Vertical and Tilting Adjustment

Тор						Stand Only		With Top			
31×42 inches								each, \$30.00		each, \$33.50	
36×48	11					1.4		11	30.50	ii	38.50
36×54	06			à.			4	44	31.00	14	40.00
36×60	a				4			**	31.50	**	42.50
36×72	44	4.	4				-	**	32.00		46.00
42×60		-	- 6	V.					31.50	1.6	45.50
42×72	100		4	4			-	16	32.00	- 11	48 00
48×72	30	4	12		3.1		-	41	22.00	- 0	52.00

F. W EMERSON'S DRAWING TABLES



Oak or Pine Top 18 x 20 inches is furnished. Weight, boxed, 60 pounds. Our Style D Table is well finished for light work, has a Vertical Adjustment of 32 to 40 inches, a Tilting Top and the legs well spread. The smallest adjustable table we make. Has all desirable features—tilting, revolving, raising and lowering, is strongly made and nicely finished in black enamel, with tempered steel springs and steel sliding standard

F. W. Emerson's Drawing Tables - continued



STYLE D WITH ATTACHMENT NO. 4



STYLE D WITH ATTACHMENT NO. 6



STYLE D WITH CABINET

Style D is the cheapest adjustable table made - not cheap in quality, but lowest priced The illustrations show the wide application and adaptability of our attachments, any or all of which may be employed

Our Draughting Tables are unapproached in utility, convenience, and arrangement

REVERSIBLE AND ADJUSTABLE BLACKBOARD

Very Convenient and Attractive



Size of Board 36×48 inches .

each, \$20.00

Particularly well adapted to the Lecture-Room and the Designing-Room. The Board can be quickly adjusted in height; can be used on either side, and can be easily revolved about its supporting spindle without danger of changing its height, or if so desired it can be made perfectly rigid

FROST & ADAMS CO.'S COMBINATION FILING CABINETS



NO. 25 A

No. 25A.	With Top	37×54 in.	4	19	14.1			each	\$73.00
25B.	16	37×60 "					7	44	74.50
25C.	44	40×72 "					1.2	1.5	78.50

We can also furnish them with a Flat Top, same as cut No. 26 A

With	Flat	Top,	37×50 in.	4	*	+		each	\$65.00
44		**	37×60 "					11	66.50
2.2		te	40×72 "					- 66	70.50

This combination is composed of two Filing Sections and a base of sufficient height, so as to give foot space to stand up close. The top is so arranged that it can be made to project over the front 6 to 8 inches, can be raised and lowered from 35 to 43 inches on the level, and can be tilted to any angle

These parts are securely fastened together so as to make a very rigid

This Cabinet has ten drawers, 32×42½×2 inches deep, inside measurement

FROST & ADAMS CO.'S COMBINATION FILING CABINETS



NO. 26A

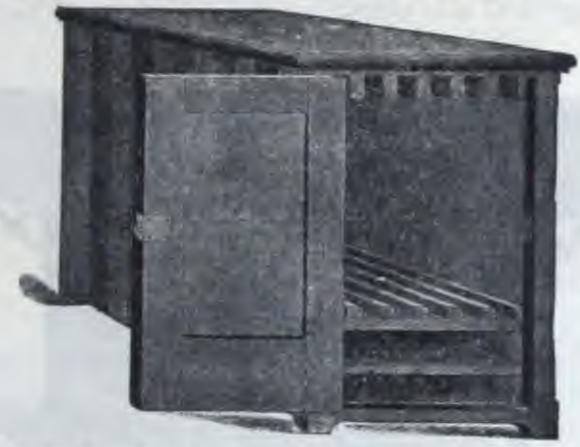
No. 26A.	With Top,	37×50 in.	2			each, \$	19.00
26B.	**	37×60 "				** [50.50
21C.		40×72 °		10		41 [64.50

We can also furnish the above Table, with a large drawer underneath, 6 inches deep, which will be very convenient for storing rolls of paper. Price \$6.50 extra

Two of the Tables can be set together if an extremely large top is desired

This cut makes a combination of one Drawer Section, with flat top or Drawing Board, which is put on with slides, so it can be drawn forward, and gives five drawers for filing purposes, 32 x 42½ x 2 inches. This makes a very neat as well as durable outfit, which can be used for two purposes, and is very reasonable in price

MORSE DRAWING BOARD CABINET



Cabinet and 6 boards, 12×18 each, \$15.00

This Cabinet is made of oak, highly finished with brass trimmings, lock and key. It is made in several sizes, and will be found very convenient for architects, designers, patent office draughtsmen, and also for school use

Prices for other sizes furnished on application

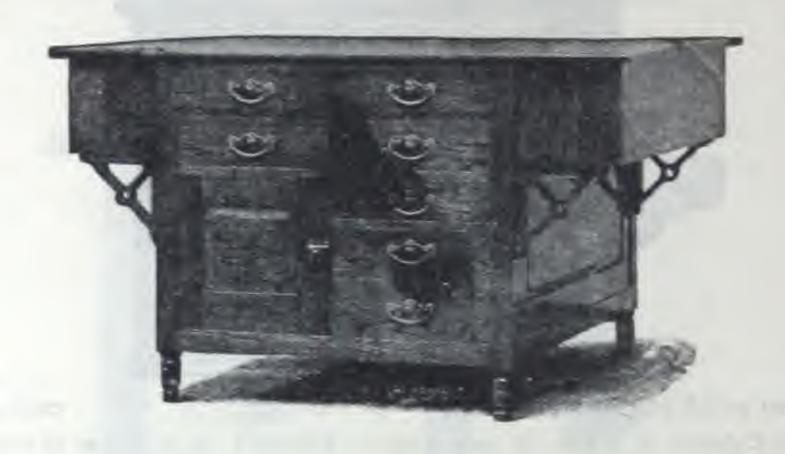
DRAWER CABINET FOR FILING DRAWINGS



Drawer	Cabinet,	quartered oak, polished finish		, each,	\$50,00
**	- 11	plain oak, polished finish .		100	40.00
- W	- 41	ash, plain finish	100	. 11	37.00

The above Cabinet is one that we keep in stock, and we generally have them on hand in plain and quartered oak. This Cabinet has six drawers; inside measurement, 28×43 inches; five are 3½ inches deep and the bottom drawer is 5½ inches deep

PAPER CABINET AND CUTTER



No. 1. Length over all, 62 inches; height 36 inches; depth, inside measurement, 37 inches each, \$75.00

The boxes at each end are arranged to facilitate the work of cutting and to provide a convenient place for a large roll of paper. They are made with lids which lift up out of the way when putting the roll in place. The one at the left contains a series of compensating rollers, on which the roll of paper rests, making it very easy to draw the paper out to any desired length

There is a brass slot to guide the knife in cutting the paper, which is held firmly in position by a steel bar fastened to the lid at the left. The receptacle at the right is very convenient when cutting up quantities of blue process paper, as the paper can be placed in it and the lid closed, excluding all light, thus keeping the paper in perfect condition and facilitating the work of printing

This Cabinet has five drawers and four large pigeon holes, one of which is intended for blue process paper and has an extra door. This Cabinet is made of oak, highly finished, and accommodates paper from 36 to 42 inches in width

FILING CABINET OR CASE OF DRAWERS

Designed Especially for Schools, Offices and Drafting-Rooms



Filing Cabinet each, \$85.00

Length, 51 inches

Width, 40

Thickness, 114 "

Height, 38

It is carefully squared and left in its natural color, to serve as a Drafting Board, or Table if so desired

There are twelve drawers divided into compartments varying from 10½ inches long and 8¼ inches wide to 43½ inches long and 34½ inches wide. Each drawer is 2 inches deep on the inside, and each compartment has a shelf which forms a pocket to keep down the back edge of drawings. It also has three graded wooden slats hung on tapes to keep down the front edge of drawings or other papers. (See illustration)

The sides and also the back of this Cabinet are nicely paneled. The finish is in cherry stain and varnish. Aside from its convenience and great storage capacity, this Cabinet is a handsome piece of furniture

IMPERIAL SECTIONAL FILING CABINETS

For Filing Blue Prints and Drawings Flat



NO. 21, SHOWING THREE SECTIONS, DRAWER BASE AND TOP

	Complete as shown			each, \$73.75
21A.	Single Section, 5 drawers, 23 x 31 x 2		1	" 18.50
21B.	Rose with dearner 51/ in door			" 11.25
	Base without drawer			4.00
21D.				7.00

Outside dimensions, per section: width, 34 in.; depth, 2514 in.; height, 141/2 in.

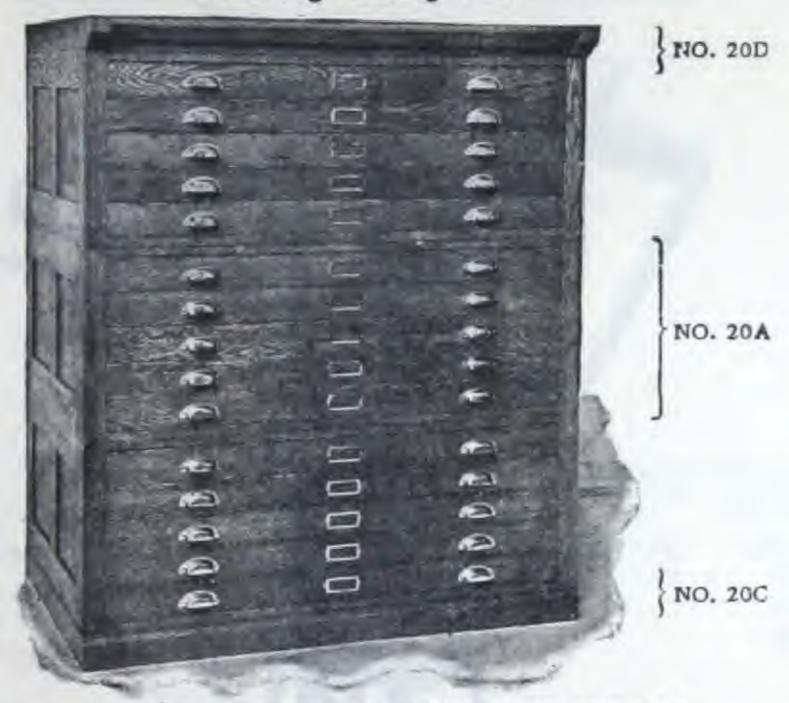
These Cabinets are made in sections holding five drawers, each 2 inches deep, inside measurement 23×31 inches. The sections are so constructed that they will fit properly over each other, and have a top and base, so Cabinet may be built up to any number of sections

These Cabinets are made of plain oak and golden oak, rubbed finish. We also make them of quartered oak, to order

All the drawers are fitted with holders in rear to prevent sheets from curling up. All our goods are put up in good workmanship

DOUBLE ELEPHANT SECTIONAL PLAN CASES

For Filing Drawings Flat



NO. 20, SHOWING THREE SECTIONS, BASE AND TOP

N

Jo. 20.	Complete as shown		*	each, \$80.00
	Single Section, 5 drawers, 32×421/2	X 2		22.50
20B.	Base with drawer 514 in. deep .		 	11.00
	Base without drawer			5.00
	Top			7.50

Outside dimensions, per section: width, 45% in.; depth, 34% in.; height, 14% in.

They are uniform in size, and our regular Double Elephant Cabinet will be found always the same, so that any number of Sections procured at different times will fit perfectly; this can also be said of the finish. We have used on all our work, for years, our special formulæ, prepared carefully, so that our work will be always finished the same

The Top and Base make a neat finish. The Bases are made in two styles, one a plain moulded base 3½ in. high, the other containing a drawer 5¼ in. deep and 42½ in. long by 32 in. wide, inside measurement. The Top fits any section, is closed at the top, made in one style, and corresponds to either base. Height of top, 3½ in.

THE BUCKEYE ELECTRIC BLUE PRINTING MACHINE



Style A.	Height over all 7 feet, 11 inches (Makes two prints 42×44 inches)		each, \$225.00
Style B.	Height over all 9 feet, 5 inches (Makes two prints 42 × 60 inches)	41	each, \$250.00
Style C.	Height over all 10 feet, 5 inches (Makes two prints 42×72 inches)		each, \$300.00

The Buckeye Electric Blue Printing Machine is of the vertical cylindri. cal type, composed of two half cylinders of polished plate glass held in position by a frame

Each half of this cylinder is provided with a curtain to hold the tracing and sensitized paper tight against the glass during exposure

The lamp is supported by a crane and travels down centrally through the cylinder while making the exposure. The speed of its travel, determining the length of exposure, is regulated by a suitable governor

When ordering always state the number of volts and whether current is direct or alternating, if alternating give frequency of cycles. This information can be obtained from the electrical company furnishing the current. Catalogues furnished giving full information

PRINT FRAMES, FIRST QUALITY, HARDWOOD



245

			Frames Only	With Pads	With Pad and Double Thick Glass	With Pad and Polished Plate Glass
242.	20×24 inch	each,	7.20	\$ 7.95	\$ 9.60	\$10.75
243.	24×30 "	16	9.50	10.60	13.20	16.00
244.	30×42 "	- 10	14.75	16.75		25.75
245.	36×60 "	15	20.00	22.60		86.90

Other sizes, also larger, made to order

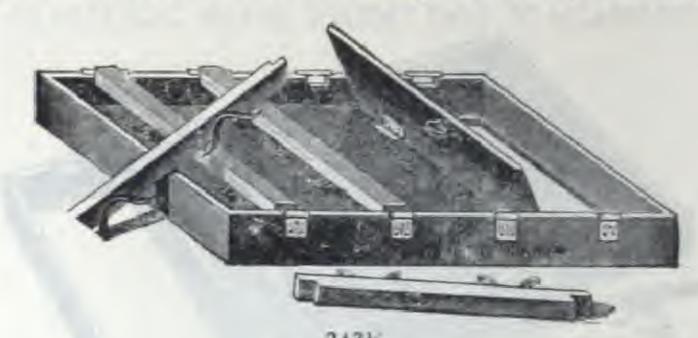
The above Print Frames are made of carefully selected, thoroughly seasoned hardwood, are of perfect workmanship and have brass trimmings. The springs are as heavy and as numerous as the glass will allow, and insure perfect contact. The spring catches for the bars are protected by wooden casings, as shown in the cut. The frames are made to stand the exposure to the weather incidental to their use. The chief advantage in getting hardwood frames of best quality and workmanship instead of the cheaper kind, is their lesser liability to warp and shrink and thereby break the glass

For sizes larger than 24×30 only Plate Glass should be used, on account of its greater strength. It will be found more economical for the smaller sizes also

Packing of Print Frames will be charged at cost, but we are not responsible for breakage of glass

Note. - In ordering Print Frames please state whether pad is wanted and whether double thick or polished plate glass, or none

PRINT FRAMES, SECOND QUALITY, PINEWOOD



				243%		man in the same	444 20000
				Frames Only	With Pads	With Pad and Double Thick Glass	With Pad and Polished Plate Glass
242 ¼ . 243 ¼ . 244 ¼ . 245 ¼ .	20 × 24 inch 24 × 30 '' 30 × 42 '' 36 × 60 ''	* * * * * * * * * * * * * * * * * * * *	each,	\$5.00 6.40 10.00 16.00	\$5.70 7.50 12.00 19.25	\$6.25 8.90	\$9.00 10.90 20.25 39.00

PRINT FRAMES FOR PATENT OFFICE DRAWINGS, Etc.

2421/2. 11×16 in., Pinewood, with Dbl. Thick Glass and Pad each, \$4.00 2431/2. 16×21 " 6.00

ZINC BATH TRAYS

First Quality, with Drain Pipe, Strong Wire Rim and Hardwood Braces



248 AND 248D

	Pla	in. for B	lue Pr	ints		Asphalt Coated, for Nigrosine and Umbra Prints						
20×24	inch		4	each,	\$ 5.00	20×24	inch		1 6	each.	\$ 5.00	
24×30	5.5	-	40	- 11	6.25	24×30	6.6			11	6.25	
30×42	XX.	10		3.6	8.95	30×42	91			3.6	8.75	
36×48	4.0	4	10,00	11.	11.00	36×48	16	470		10	11.00	
36×60	**			-16	12.50	36×60	168			44	12.50	

PRINT FRAMES, QUALITY A



								Frame Only	With Pad	With Pad and Polished Plate Glass
o.	1	20×26	inch			74	each.	\$ 9.50	\$10.80	\$11.80
٠,	2.	24×30	64	-			44	10.80	11.90	13.00
	3	25×37	- 11		-	1	48	12,60	13 90	18.25
	4.	30×42	116				17	15.70	17.50	21.75
	5.	36×42	11	100	76	012	111	18.00	20.25	27.25
	6.	36×48	61.		99		11	19.80	22.50	29.50
	7.	36×54	10				44.	23.40	26.50	35.25

BLUE PRINT CARS



Style A for frames up to and including 30×42 inch each, \$21.50 \$10.00

Style A is a very convenient apparatus which can be run on iron tracks. Made to revolve and tilt at any angle to receive the direct rays of the sun; can clamp in any position; may be turned over to receive work. The iron work is enameled, and the wood work of highly finished oak. We recommend this style for frames Nos. 1, 2, 8, 4, 5 and 6

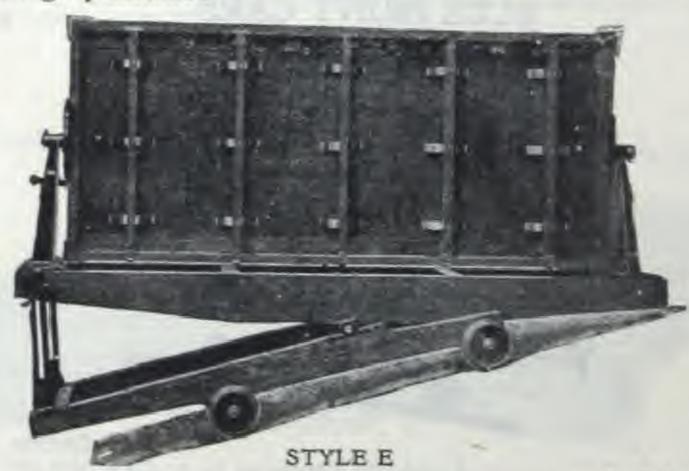
Blue Print Cars - continued



For	frames	upto	and	including	30	x 42 i	uch		Car Only \$26.00	Track Only \$10.00
	**	**	1.5	15	48	inch	wide	16	31.00	18.00
- (1		**	44	61	60	4.0	1.5	**	44.00	20.00

These prices do not include blue print frames

The tilting of the frame is controlled by a notched wheel which permits the frame to be fixed at any angle. A frame which is much wider than the window can be swung through and afterwards adjusted to the desired angle. The frame can be turned over for the insertion of blue print paper, etc. The iron work is handsomely enameled, the woodwork is of oak, highly finished



For frames up to and including 30×42 inch . each, \$32.00 \$12.00

These prices do not include blue print frames

Style E is larger and heavier than Style D, and has in addition the forward tilt. We have made this car for the very largest size frames. In all other particulars it is the same as Style D and has the same high finish that we give to all our goods

Blue Print Cars - continued

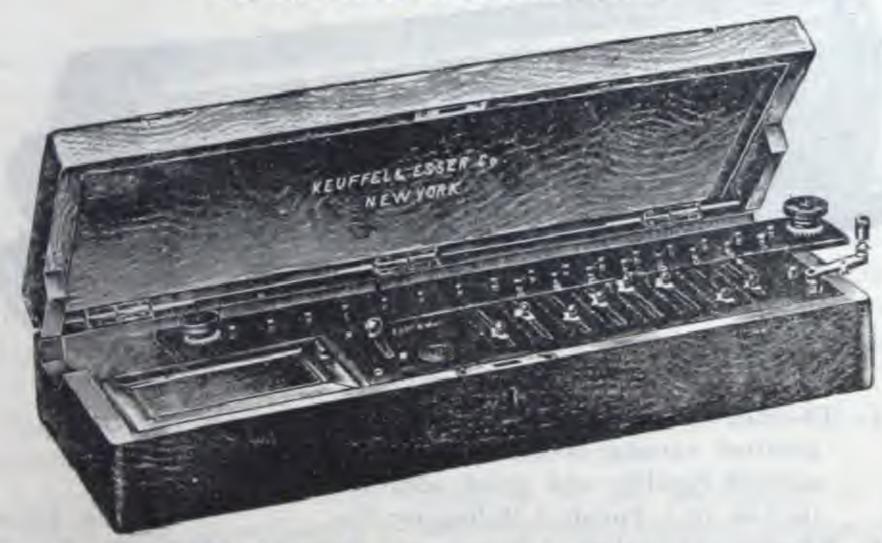


For	frames	up to	and	including	36×42	inch	+	each,	\$13.50	\$ 9.00
46	41	44	14	**	42×72	0.2		44	18.00	15 00
11	all fran	nes ov	rer		42×72			66.	26.00	16.00

Style C is a very convenient apparatus or car running on a track out of the window. It is all iron, handsomely enameled, and is fastened to a permanent blue print frame, allowing the frame to tilt to any angle for proper exposure, and can be turned completely over to allow for the insertion of tracings and blue print paper. A very fine frame, many of which are in use

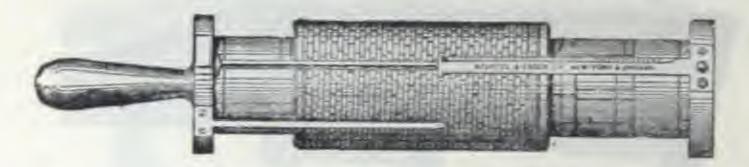
Style D is a most convenient car for handling very large frames. It is so well balanced that the largest frame can be very easily manipulated. The blue print frame is swung between two upright iron standards provided with wheels which are arranged to run out of the window on a track

RECKONING MACHINES



4005.	Reckoning Machines,	6	grooves,	12	holesin	upperrow	each,	\$193.25
4006.	44	8	11	16		66	(6	241.50
4007.	**	10	66	20	- 11		11	338.25

FULLER'S SPIRAL SLIDE RULE



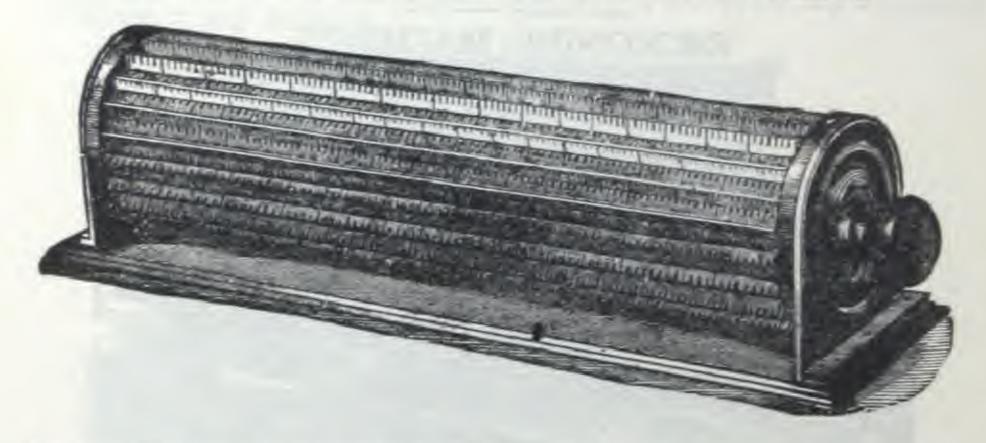
Fuller's Spiral Slide Rule, in Mahogany Box .

each, \$30.00

45.00

Fuller's Spiral Slide Rule consists of a cylinder which can be moved up or down and turned round a sleeve which is attached to the handle. A single logarithmic scale, 42 feet long, is wound round the cylinder spirally, and ratios established by means of two pointers or indices, one attached to the handle and the other to an axis which slides in the sleeves

THACHER'S CALCULATING INSTRUMENT



No. 1. Thacher's Calculating Instrument for performing the greatest variety of useful calculations with unexampled rapidity and great accuracy. Cylinder 18 inches, in a Polished Mahogany Box each, \$35.00

2. Thacher's Calculating Instrument, with the addition of a 3 inch Reading Glass, sliding on a brass bar, adjustable to any part of the instrument for focus

Thacher's Calculating Instrument - continued

The Thacher's Calculating Instrument consists of a cylinder 4 inches in diameter and 18 inches long, working within a framework of triangular bars. The scales, the longest ever made, contain upwards of 33,000 divisions and 17,000 engraved figures executed upon a dividing machine, made expressly for this instrument; they are of such great length, viz.: 30 and 60 feet each, that results can be obtained to the fourth and usually to the fifth place of the figures, sufficient to satisfy nearly every requirement of the professional or business man

By the use of this instrument the drudgery of calculation is overcome, the mind is greatly relieved, and the results obtained are more reliable than when worked out in the usual way. Examples in multiplication, livision, proportion, powers or roots, involving not more than three quantities, are solved by one operation, and any number of values of a single variable are found by one setting of the instrument, for example, any of the formula

$$\frac{ax}{b}$$
, $\frac{ax^2}{b}$, $\frac{ax}{bz}$, $\frac{ax_2}{bz}$, $\frac{ax_2}{b}$, $\frac{ax}{b}$

in which a and b may have any values and x any number of values are readily solved by one setting. Squares, square roots, cube roots and reciprocals are also readily worked

The useful applications of the instrument are almost unlimited; among these may be mentioned, finding the stresses and sections in trusses and girders, mensuration, estimates of work and material, solving trigonometrical formulas, making and applying tables, problems in the mechanical powers, better machinery and hydraulies, problems of simple and compound interest, discount and fellowship, pro-rating, gauging, exchange and the conversion of weights and measures

It will be found useful to the Engineer, Architect, Actuary, Scientist, Manufacturer, Mechanic, Navigator and Accountant

A book containing a full description of the instrument, all the necessary rules for operating it, and numerous examples, both general and special, will accompany each instrument

Testimonials will be furnished on application

CHARPENTIER AND BOUCHER CALCULATORS





4020. Charpentier's Calculator

each, \$5.00

This is a circular slide rule, 23% in. diameter, with a circular slide revolved and set by the handle. This instrument being made of metal is but slightly affected by atmospheric variations. On the face of the calculator (shown in cut) there is a logarithmic scale on the slide corresponding to another such, external to it on the body of the rule. On the surface within the slide are the square roots in two circles, one from 0 to 3162, the other from 3162 to 10, made to coincide with the outermost scale by an index. On the other side of the rule are three scales, an outer one of equal parts and two inner ones of angles from 0 to 90 and 0 to 45 respectively; the latter two give the sines of the first and tangents of the second on the scale of equal parts, by an index. The indexes on the two faces correspond, so that the logarithms of the numbers on the logarithmic scale can be read on the scale of equal parts

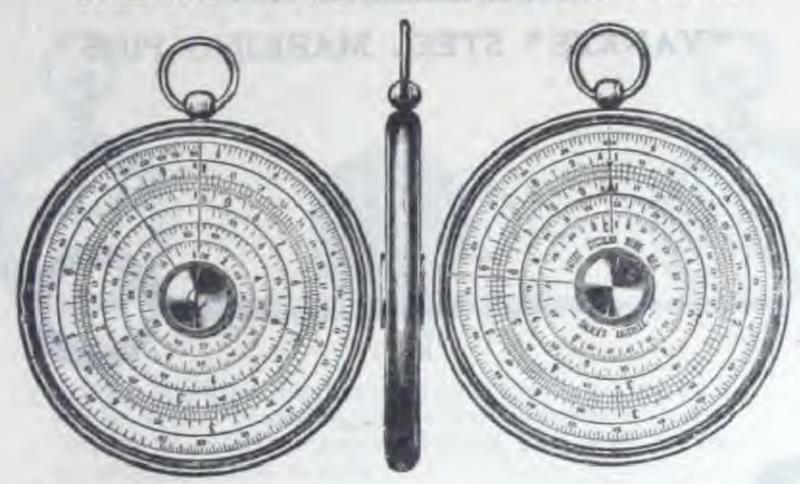
4022. Boucher Calculator, Silvered Metal Dials . . each, \$14.00

This resembles an ordinary stem-winding watch with glass covered dials back and front. It is about 21% in. diameter by 1/2 in. thick; convenient size for the pocket. One dial can be revolved by means of the milled-head key at the stem; the other is fixed. Each dial is provided with a pointer. These pointers are fixed on a common axle and moved together and alike by a milled-head key on edge of the case. Athird pointer is attached to the rim over the movable dial. The fixed dial has an outer scale of equal parts and the three inner circles are the cube roots of the numbers on the logarithmic scale from 1 to 2154, from 2154 to 4657 and from 4657 to 10, respectively. The movable dial has an outer circle of angles from 5° 44' 39" to 90°, the sines on which are found on the next inner circle, which is the logarithmic scale. Ratios are set off in a similiar manner as on the Fuller Slide Rule

4024. Boucher Calculator, Enameled Cardboard Dials . each, \$8.50

No. 4024 is similiar to No. 4022, but about 36 in. thick. There is no second milled-head key for the pointers, which are operated by the key at the stem when pressing the button on the edge

THE IMPROVED HALDEN CALCULEX



Calcuex Slide Rule, 2% inches diameter by 1/4 inch thick, in extra fine Leather Case, with Book of Rules, complete . each \$5.00

The Improved Halden Culculex is a metal dial duplex slide rule, with metal packing and lock-nut, which makes it impossible for the instrument to get out of order. It can neither warp nor shrink owing to its being entirely of metal

It is the most perfect acting and durable of all circular slide rules, and represents an important advance in the theoretical and mechanical principles upon which the Calculex is based and is acknowledged the most compact, convenient and simple slide rule, as well as the most accurate circular rule, ever known to the engineering profession

The Book of Rules is the most complete manual ever published and has been compiled and arranged to fit in the separate compartment of the leather case, so that the Calculator and Book of Rules can be carried in

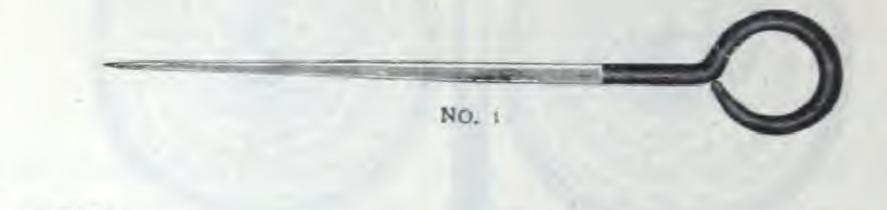
the vest pocket without the least inconvenience

The Calculex, briefly described, consists of a disc within a ring, which together form a dial surrounded by a rim, protected on both sides by glass discs on which the hairline is marked radially. It is revolved by the two thumbs. The centre of the dial is turned by holding the nut on each side between the finger and the thumb, the outside of the dial being fixed to the rim. The log of a number, squares, square roots, cubes, cube roots, angles, etc., can be found by reading direct from the hairline without moving the dials. It is capable of solving more problems than other Slide Rules and needs about one quarter of the movements

The front face contains five circles of scales. The outer scale, or No. 1 is a scale of logarithms; Nos. 2 and 3 are calculating scales A and B; Nos. 4 and 5 are square roots of scale B. The back face contains six circles of scales. The outer scale, or No. 6, is a scale of angles; Nos. 7 and 8 are calculating scales for inverse propositions; Nos. 9, 10 and 11 are

cube roots of scale B

FROST & ADAMS CO.'S "YANKEE" STEEL MARKING PINS





NO. 2

No. 1.	Set of 11 Pins 11 inches long	-20	13-		per set, \$1.25
2.	Set of 11 Pins 14 inches long	*			2.00

The "Yankee" Marking Pins are made in two sizes, 11 in. and 14 in. long and come packed in a neat box, 11 Pins in each set. They are the strongest and best marking pins; have good sharp points of hardened steel. They are made of heavy stock and will stand any amount of hard usage. We thoroughly recommend them to Surveyors and Engineers

TALLYING MACHINES







6457

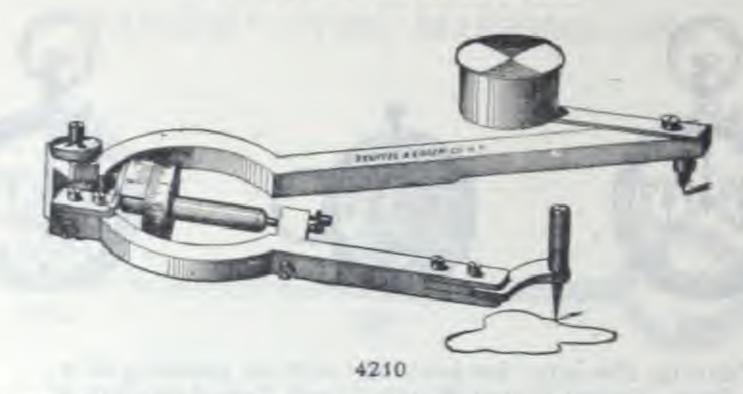
6456.	Knob, Nickel Plated Watch Cased, Porcelain Dial, 3 Graduating Circles registering to 1000, with Lever		
7.75	for setting hands to zero	each,	\$4.00
6457.	Tallying Machine, for keeping count by pressing on a		-
71	knob, Nickel Plated Watch Case, Porcelain Dial, 4		
	Graduated Circles, registering to 10,000	44	5.50
6459.	Tallying Machine, for keeping count by pressing on a		
	knob, Nickel Plated, registers to 999	11	2.50

ARROWS

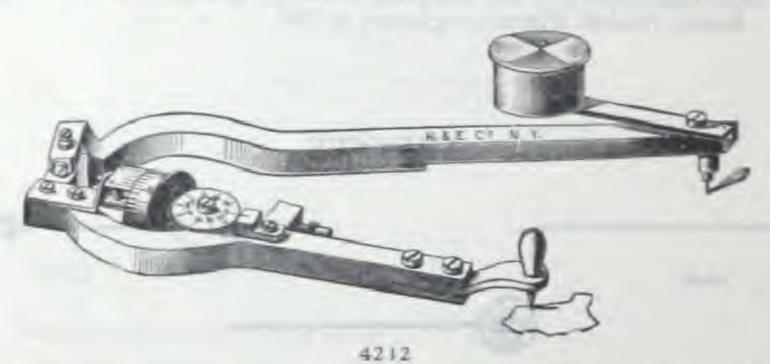


6460.	Steel Arrows,	W.G.	6.	Bright,	14	inch	, set of 11	\$1.50
6461.	Steel Arrows,	14.	9,	44	14	8.6	61	1.00
6462.	Steel Arrows,	166	9,	Japanned	12	10	-66	1.20
6463.	Steel Arrows,	**	11,	Bright,	12	84	14	.90
6464.	Brass Arrows,	15	6,	11	12	16	- 66	2.00
6470.	Iron Arrows,	16.6	9,	- 61	14	66	84	.60
6474.	Steel Arrows,	10	10,	Weighted,	14	6.6:	311	3.00
6475.	Steel Arrows,	11	8.	17	14	56	11	3.00
6476.	Steel Arrows,	X.C.	6,	Bright,	14	44	with White	1
25000		isc, 2	1/2 in	ches diame	ter.	wit	h red figures	
	1 to 11, set o	100000						5.00
6478.	Canvas Carryi		se fo	r No. 6476,	wit	h sh	oulder strap	each, 2.50

POLAR PLANIMETERS



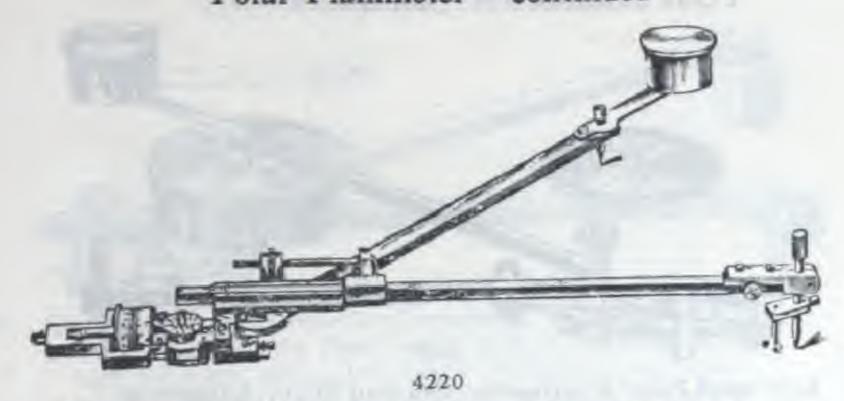
No. 4210 represents the Polar Planimeter in its simplest form. It measures up to 10 square inches in tenths and hundredths of a square inch



The Horizontal Registering Wheel registers 10 revolutions of the Measuring Wheel, so that areas of figures up to 100 square inches can be measured. The areas of small drawings made to scale may be obtained by reduction

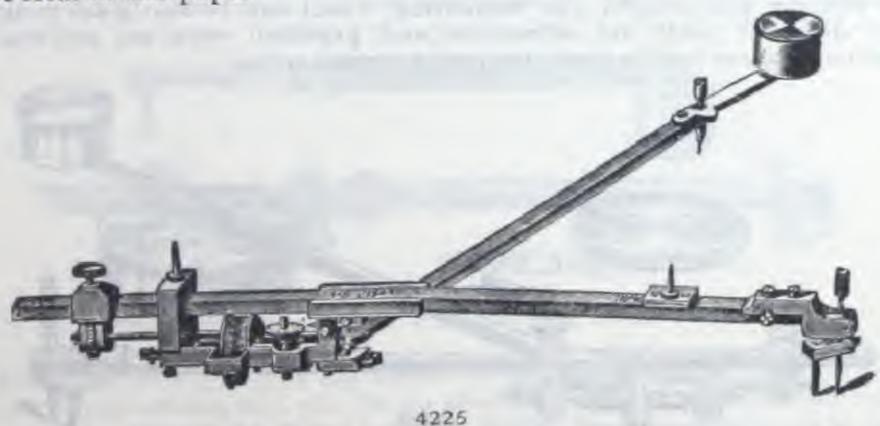
*The improvement of the Needle Point consists in having a weight attached to a bar revolving around the pole, which can be directed to counterbalance the weight of the instrument proper in any position

Polar Planimeter - continued

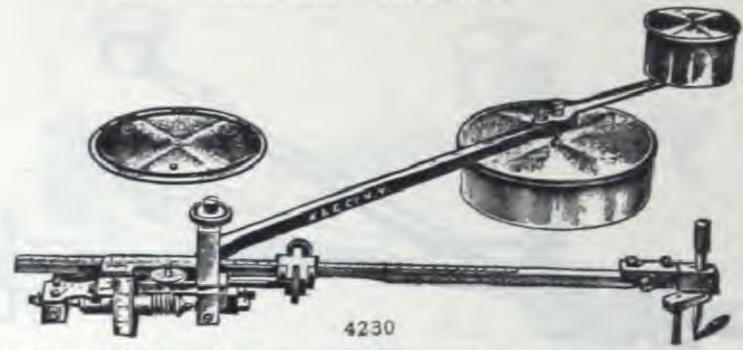


4220. Polar Planimeter (Amsler's pattern) German Silver,
Adjustable Tracer-Arm with Index Marks for 4
Ratios, and with Clamp and Slow-Motion Screw.
Improved Needle-Pole, in Polished Mahogany Case,
with Directions each, \$28.00

This instrument has improvement over the regular Amsler Planimeter. The flange of the roller wheel is at the centre of wheel axis, thus distributing the wear. The horizontal disc is so placed that it is always visible. The tracer-arm is adjustable, and marks for setting to several scales are indicated on it. The adjustable tracing point can be brought into alignment with axis of roller-wheel. A support, keeps the point just clear of the paper



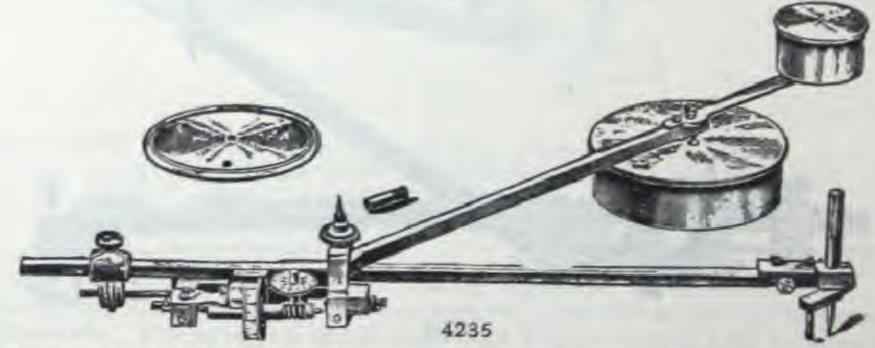
Polar Planimeters -continued



4230. Improved Polar Planimeter, German Silver, Adjustable Tracer-Arm fully graduated, with Vernier, Clamp and Slow-Motion Screws, Ball-Pole, Pole-Weight, Balancing Weight, Testing Disc and Table of Settings for U.S. Standard and Metric Measures, in Polished Mahogany Case, to hold instrument when set to any scale, with Directions.

each, \$33.35

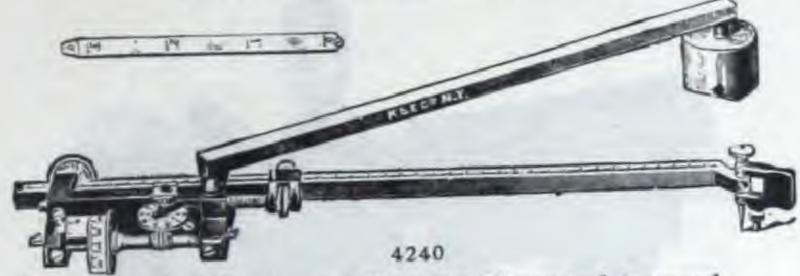
As the tracer-arm is fully graduated, very fine settings can be effected with great accuracy for any scale in U.S. Standard or foreign measurement, and allowance made for the shrinkage of drawings. It is also provided with index marks for a number of scales for U.S. Standard and Metric measurements. The Testing Disk greatly facilitates the rapid finding of settings, proves instrument's accuracy and aids in adjusting it. By shifting pole-weight, the measuring wheel can be easily set to zero. The different parts are adjustable and provided with set screws, so that corrections can be made for instrumental errors



4235. Improved Polar Planimeter, German Silver, like 4230 but with special device for finding the Mean Height of Indicator Diagrams (explained on page 402) each, \$35.50

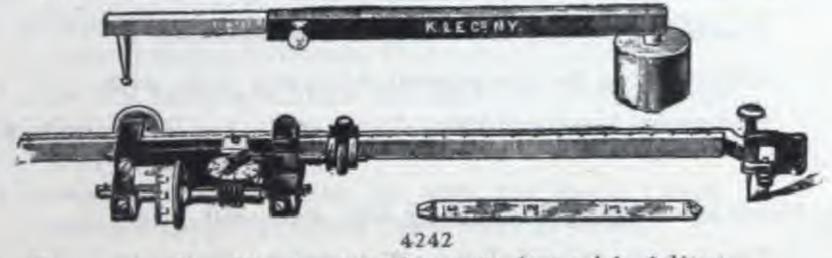
The Steel Points of this instrument when not in use, are protected by German Silver Caps so not to interfere when measuring areas

Polar Planimeters - continued



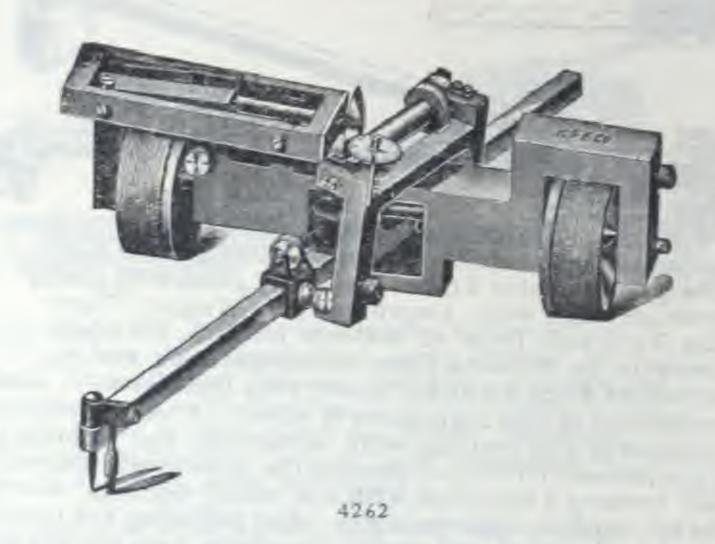
4240. Compensating Planimeter, German Silver and Bronzed
Brass; Adjustable Tracer-Arm fully graduated (see
note on page 403); Improved Pole-Weight; Testing Rule and Table of Settings for U.S. Standard
measure, in Morocco Case, accommodating the instrument when set at any scale, with Directions each, \$36.00

The construction of this Planimeter is novel. It consists of two parts; one the tracer-arm and carriage with measuring and recording wheels, the other the pole-arm having at one end the pole-weight and at the other a steel ball, forming a ball-joint with the wheel carriage, which cannot become shaky, nor is it liable to injury when adjusting the tracer-arm as each part can be handled and stored separately (see cut below). This gives the tracer-arm a motion of 180° right and left; much greater than the usual Planimeters having a motion of only about 90°. By measuring a diagram with the pole on the left and again on the right side of tracer-arm and taking the mean reading, all instrumental errors are compensated. The improved pole combines the pole-weight and needle-pole. The improved tracing point can be clearly seen in the cut



The adjustable pole-arm has index marks for different settings furnished with instrument, and can be so adjusted that with pole inside of a figure the constant is a round number, 20,000, for any setting. It is used in the same way with pole inside as outside, and by tracing the figure with pole on the right and on the left of tracer-arm and taking the mean reading, very large areas can be measured very accurately. The extensibility of pole-arm and great range of tracer-arm permit measuring very large figures with pole outside. By reducing length of pole and tracer-arms, it can be used on a very small space

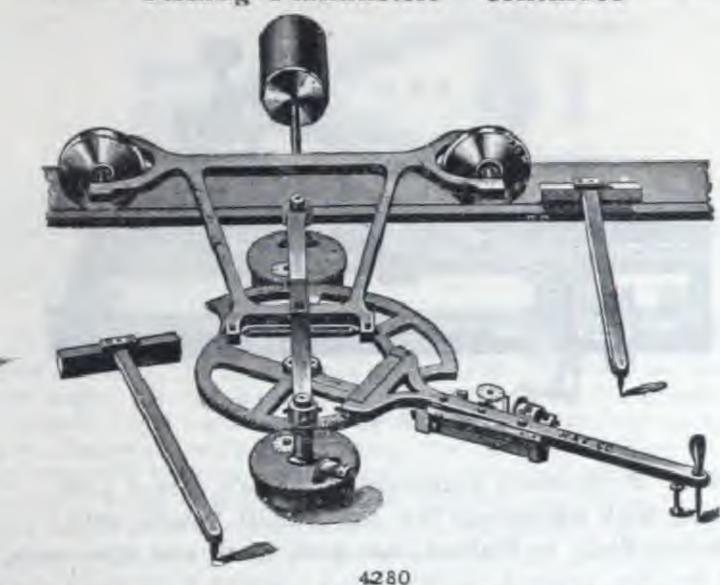
ROLLING PLANIMETERS



4260. Precision Rolling Planimeters of German Silver and
Brass; adjustable Tracer-Arm, fully graduated, 8
inches long with 8 inch Telescoping Extension Piece
with Testing Rule and Table of Settings for U.S.
Standard and Metric measures; Morocco Case ac
commodating the Instrument set to any ratio, with
Directions, Lock and Key each, \$82.50

The Rolling Planimeter moves on two broad rollers, from one of which motion is imparted to the recording mechanism. The area of a figure of any length and the width of which does not exceed the length of the extended tracer-arm can be measured in one operation

Rolling Planimeters - continued



4289 Amsler's Integrator, with three Recording Mechanisms giving the Area, Moment, and Moment of Inertia of any figure; German Silver, two Tracing Points; two Gauges for adjusting instruments to axis of moment; instrument in Walnut Case; Grooved Steel Rail, 59 inches in separate Hardwood Case; with Directions each, \$175.00

4282. Amsler's Integrator, like No. 4280, but Brass, Longitudinal Range 56 inches, Transverse 13 inches . " 150.00

4288.* Amsler's Integrator, like No. 4286, but Brass, Longitudinal Range 67 inches, Transverse 26 inches . ** 230.00

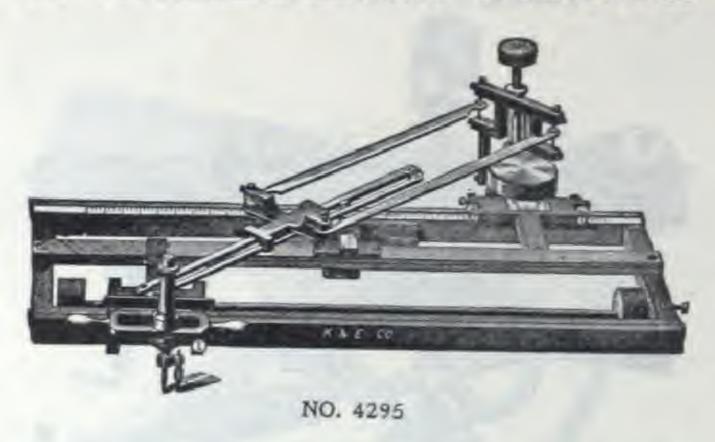
Integrators No. 4280 and 4282 are provided with a third train of recording wheels which renders the moment of inertia of the figure measured

Integrators Nos. 4286 and 4288 are practically the same instruments as Nos. 4280 and 4282, but built on a larger scale so that they measure proportionately larger figures by one operation

Rails of other lengths furnished to order at short notice

*Integrators marked * are not carried in stock but are imported to order only

CORADI'S MECHANICAL INTEGRAPH



4295. Coradi's Mechanical Integraph, German Silver and
Brass, with Swiveling Pen and Pencil Points, with
Testing Rule, in Walnut Case with Lock and Key each, \$157.50

Like the Mechanical Integrators, the Integraph has proved in a comparatively very short time to be an aid of no small consideration to Civil and Mechanical Engineers and especially Naval Architects. The instrument enables them to compute the different moments, curves of stability, etc., as with the Integrator, but in one way it is superior to the latter. While it is necessary with the Integrator to compute the several curves point by point and to construct them by means of the computed points, the Integraph directly draws the curves on the paper, thus giving a graphical representation of the integration. The operator traces the outline of the figure, i. e., the differential curve, and the pen or pencil point automatically draws the integral curve. The value of the ordinate of this integral curve can be measured off on the paper or read on a finely graduated bar. This value multiplied by the constant furnished with the instrument, gives the area of the figure. By regarding the new curve as the differential curve and tracing it in the same manner in which the first one was traced, the integral curve of the next higher order is drawn, the ordinate of which multiplied by the constant gives the moment of the original diagram. By repeating this operation, the moment of inertia, moments of the 4th, 5th, etc. order can be readily found. By this means practically all problems of stability, etc., may be solved almost entirely by mechanical operations, and much labor and brain work saved

FROST & ADAMS CO'S TAPE MENDERS



Punch and Set combined, including 500 large and 500 small

I Harry was to a comment, and	a rece a	11 P 1110	Il sees	Pr m	THE DI	W am	WII.
Eyelets		13	. 4.				per set, \$4.00
Punch only, without Eyelets							each, 2.75
500 Eyelets, separate, large				4			11.25
500 " small				-			" 1.25

The cut shows the new Punch and Set combined, for repairing steel tapes: tool, socket, punching pin and three eyelets, viz.: shorts, longs and extra longs. It cuts a clean hole through two thicknesses of Chesterman or Lufkin Tape (or any other of the same thickness) one sixteenth of an inch in diameter, without drawing the temper. There is absolutely no filing required by this method except to round off the rough corners of the break. After cutting first hole, place an eyelet on the pivot for it, and insert in the hole cut, and it is riveted as quickly as the hole was cut. The first rivet or eyelet holds tape in position for cutting or riveting the rest. Five minutes is average time to make a repair without any danger of splitting the tape, thus avoiding any chance of dirt collecting under the splice or cutting the fingers when drawing the tape through the hands, or catching in rags, etc., when cleaning

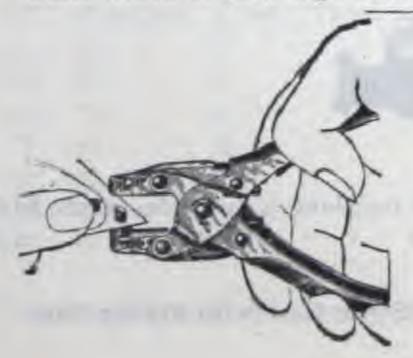
THE EUREKA TAPE REPAIRER

Specially adapted for Light Pocket Tapes

The Eureka Tape Repairer Sleeves, . . per dozen, .50 each, .05

Directions. Clean the broken ends of the tape with a kuife or sand paper; insert the broken ends in the sleeve; hammer the sleeve slightly so it closes well down on the tape; then hold a lighted match under the sleeve while it burns itself out; then if you can pull it apart we will refund double the money it cost you

State width of your tape and whether heavy or light



SOLIDHED EYELET PLIERS

Solidhed Eyelets Pliers . each, \$1.00 Solidhed Eyelets per thousand, .40

The simplest, easiest and quickest Punch and Eyelet Set for fastening papers, eyeletting cards, samples, etc.

To operate, punch a hole, allow the Pliers to open without removing punch, place an Eyelet with the small end down on top of the punch and close

CHEST'ERMAN'S

METALLIC AND STEEL MEASURING TAPES



			25 ft.	33 ft.	50 ft.	66 ft.	75 ft.	100 ft.
33L. All Linen, 56	inch wide	each,	\$1.40	\$1.60	\$2.10	\$2.40	\$2.60	\$3.20
34L. Metallic, 56				2.10				
38L. Steel, 3/8	inch wide	- 11	4.50	5.20	7.20	9.20	10.40	12.80
Medallia Mana in			19				15.00	

Metallic Tape, in strong, Bent Leather Case, divided 19ths or 12ths

50 ft. 66 ft. 75 ft. 100 ft. 126. Metallic Tapes only, without Case each, \$1.50 \$1.80 \$2.20 \$2.90 Please specify in ordering whether 10ths or 12ths is desired

CHESTERMAN'S POCKET MEASURING TAPES



3 feet long, 1/4 in, wide each, \$2.00 9 feet long, 1/4 in, wide each, \$4.00 5

6 " 2.75

Steel Tape, for the pocket, in German Silver Case, with Spring Stop

LUFKIN POCKET LINEN MEASURING TAPES



173.	36 i	nches,	marked one side	in incl	nes and eighths		each,	.35
175.	60	44	86	96	66	4	**	.45
176.	72	11	.00	4.6	316		8.8	.50

Nickel Plated Brass Cases, Spring Wind with Centre Stop. With 1/4 inch Enameled Linen Tape

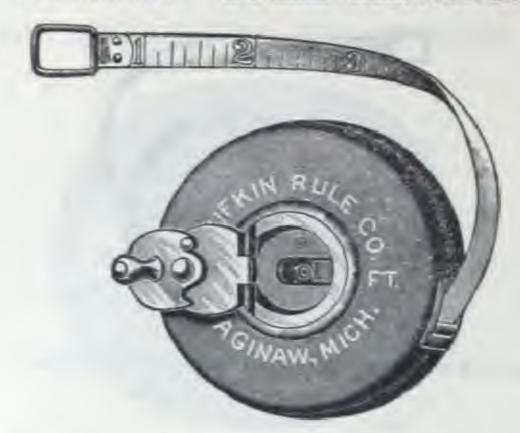
LUFKIN POCKET STEEL MEASURING TAPES



153.	36 i	nches,	34	inch Tape,	marked	inches and	1,ths		each,	\$1.40
154.	48	86	14	1.0	114	17 174	16	- 1	81	1.60
155.	60	-61	34	20	14	44	T.E		. 64	1 80
156.	72	-0.	14	-64	iv	0.1	86	-	14	2.00
157.	84	4.0	34		44		16		44	2.30
158.	96	341	14	11	KL.	10	3.6		44	2.50
1510.	10 1	feet,	16	1 12	100	feet, inches	and	ths	4.6	3.20
1512.		11	5	41	11	**	. 10	10	44.	3 60

German Silver Cases, Spring Wind, with Stop. Marked one side only

LUFKIN "RELIABLE" STEEL MEASURING TAPES



Marked feet and raths (inches and eighths)	Marked feet roths and rooths of feet for Surveyor's use	Le	ngth		Diameter of Case			Nickel Plated Tapes Extra
200.	200D.	25	feet	234	inches	each,	\$4.50	\$1.00
201.	201 D.	33	31	234	3.6	int	5.20	1.00
202.	202D.	40	004	35	12 1	99	6.00	1.50
203,	203D.	50	41	33	44	- 1/4	7.20	1.50
204.	204D.	66	13	334	- 01	cc	9.20	1.75
205.	205D.	75	18	434	.64.	Zi.	10.40	1.75
206.	206D.	100	11	432	-11	11	12.80	2.00

With Double Folding Flush Handle, opened by pressing small pin or button on opposite side. Hard Leather Cases. Nickel Plated Trimmings. Measurements guaranteed perfectly accurate. With 1/8 inch Tapes

The above Tapes are marked on the backs with links and poles. When links are not wanted they will be supplied marked at every foot instead, at same price

Tapes marked metric measure, one side only, at same price as corresponding lengths in feet

Tapes marked feet on one side, metric measure on the other, add 21/2 cents per foot to list price

Tapes marked feet and 12ths one side feet and 10ths on the other, add 21/2 cents per foot to list price

LUFKIN "RELIABLE JUNIOR" STEEL MEASURING TAPES



WITH ONE QUARTER INCH TAPES

Marked feet and 12ths (inches and sixteenths)	Marked feet 10ths and 100ths of feet, for Surveyor's use	Length		ameter Case			
100.	100D.	25 feet	214	inches	-	each,	\$3.75
101.	101D.	33 11	21/2	**		11	4.00
103.	103D.	50 **	234	11		77	4.60
104.	104D.	66 "	3	164		11	5.25
105.	105D.	75 "	31/4	-11		3.1	5.75
106.	106D.	100 11	314	10.10		11	7.00

With double folding flush handle, opened by pressing on opposite side.

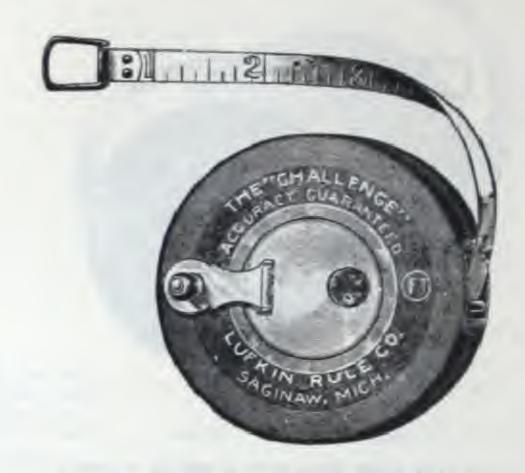
Hard leather cases. Nickel plated trimmings. Measurements guaranteed perfectly accurate

Tapes marked metric measure, one side only, at same price

Tapes marked feet one side, metric measure on the other, add 2 cents per foot to list price

Tapes marked feet and 12ths one side, feet and 10ths on the other, add 2 cents per foot to list price

LUFKIN "CHALLENGE" STEEL MEASURING TAPES



Marked feet and 12ths, (inches and eighths)	Marked feet, 10ths and rooths of feet, for Surveyor's use	Length	Diameter of Case	
260.	260D.	25 feet	2¾ inches	each, \$3.25
263.	262D.	50 **	3,14 "	4.00
265.	265D.	75 "	41/4 "	" 5.25
266.	266D.	100 "	41/2 "	6.75

Hard Leather Cases, Nickel Plated Trimmings, Flush Handle 1/2 inch Tape, marked one side only, in tenths or twelfths

Marked inches one side, metric measure other side, add 2½ cents per foot to list price

LUFKIN "RIVAL" STEEL MEASURING TAPES



Marked feet and 12ths (inches and eighths)	Marked feet, noths and nooths of leet for Surveyor's use	Length	Diameter of Case		
240.	240D.	25 ft.	2¾ in.	each,	\$2.75
243.	243D.	50 ft.	33% in.	41	3.40
245.	245D.	75 ft.	3¾ in.	84	4.50
246.	246D.	100 ft.	4¼ in.	8.0	5.75

Nickel Plated Steel Cases, Flush Handle, 36 inch Tapes, marked one side only in tenths or twelfths

Marked inches one side, metric measure the other side, add 2% cents per foot to list price

LUFKIN METALLIC MEASURING TAPES



Marked one wide only, raths	Marked both sides, raths and Links	Marked both sides toths and Links	Lei	ngth		
500	500L	500DL	25	feet	each.	\$1.80
501	501L	501DL	33	4.5	4.4	2.10
502	502L	502DL	40	n.	34	2.25
503	503L	503DL	50	116	14.	2.60
504	504L	504DL	66	11.	19	3.00
505	505L	505DL_	75	XI.	11.	3.30
506	506L	506DL	100	122	n	4.20

Tape % inch wide, made of Best Woven Linen with Metallic Warp. Hard Leather Cases, Brass Folding Handles and Brass Trimmings

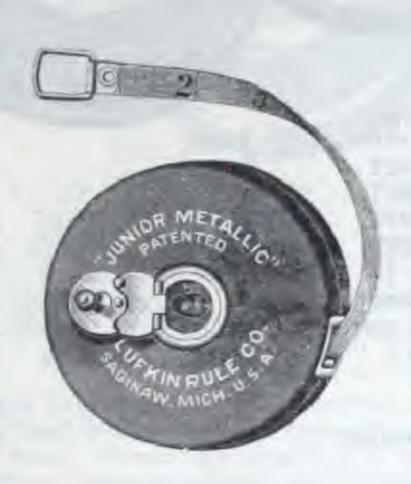
Tapes marked in meters and centimeters on back instead of links, price same as tapes marked both sides

Tapes marked in feet on back instead of links, price same as tapes marked both sides

METALLIC TAPES ONLY, NO CASES

			25 ft.	33 ft.	40 ft.	50 ft.	66 ft.	75 ft.	100 ft
Marke	ed one side	each,	.80	\$1.00	\$1.20	\$1.40	\$1.60	\$1.80	
1.6	both sides		.90	1.10	1.30	1.50	1.80	2.00	2.00

LUFKIN "JUNIOR METALLIC" MEASURING TAPES FLUSH HANDLE

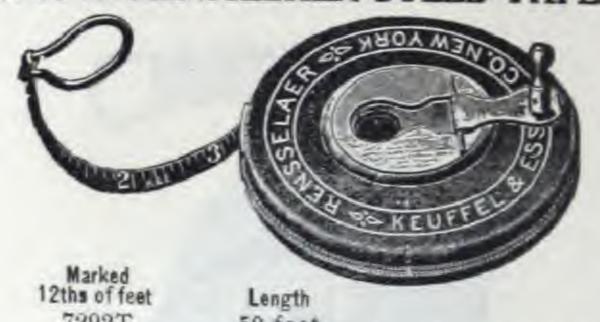


WITH THREE EIGHTH INCH TAPES

Marked feet and 12ths (inches and eighths)	Marked feet 10ths and 100ths of feet, for Surveyor's use	Length	Diameter of Case		
660.	660D.	25 feet	214 inches	4	each, \$1.80
661.	661D.	88 **	3	17	2.00
663.	663D.	50 ''	31/2 "	7 .	1/ 2.25
664.	664D.	66 ''	3¾ "		** 2.75

With our patent double folding flush handle, same as we use on our "Reliable" Tapes, opened by pressing pin on opposite side. Tape is made of best woven linen, with metallic warp, hard leather cases, nickel plated trimmings. Marked one side only in tenths or twelfths

K. & E. RENSSELAER STEEL TAPES



Marked 10ths of feet	Mark 12ths of			Le	ngth		1				
No. 7292D.	7292	T.			feet				-	each	\$ 7.50
7293D.	7293			66	11			-		11	9.55
7294D.	7294			75	41	+				31	10.80
7295D.	7295	T.		100	44	+				44	13.40
Metric ione side only)	Ler	igth									
No. 7292M.		nete	rs						4	each.	\$ 7.50
7293M.	20	11		4			2		-	FI	9.55
7294M.	25	**								9.6	11.80
7295M.	30	- 65	-	4						16	13.40

Please order by number

K. & E. LILIPUT STEEL TAPES



		Dimensi ns	Weight	Length	
12ths of feet	7274D	314 × 1/2	8 1/2 oz.	75 ft	each, \$5.60
10ths of feet	7274T	314×1/2	14	34	5.60
12ths of feet	7275D	34×54	10½ oz.	100 ft	1X 6.80
10ths of feet	7275T	334 × 1/2	2.0	11	6.80

Stout bent leather case, patent centre, long swiveling flush folding handle, opened by pushing handle pin from opposite side of case. Nickel plated mountings. Graduations begin at outside end of ring

Please order by number

K. & E. CORNELL STEEL TAPES KECO FINISH



Length	in feet	25	33	50	66	75	100
12ths of feet		7250T	7251T	7252T	7253T	7254T	7255T
10ths "		7250D	7251D	7252D	7253D	7254D	7255 D
	Each,	\$4.15	\$4.75	\$6.65	\$8.45	\$9,60	\$11.85
12ths of ft. and	Links	7250TL	7251TL	7252TL	7253TL	7254TL	7255TL
10ths " "	44	7250DL	7251DL	7252DL	7253DL	7254DL	7255 DL
	Each,	\$4.30	\$4.95	\$6.85	\$8.75	\$9.90	\$12.15

K. & E. Cornell Steel Tapes, 1/8 in. wide, stout bent leather case, patent centre, long swiveling flush folding handle, opened by pushing handle pin from opposite side of case. Centre adjustable for wear. Nickel plated mountings. Graduations begin at outside end of ring

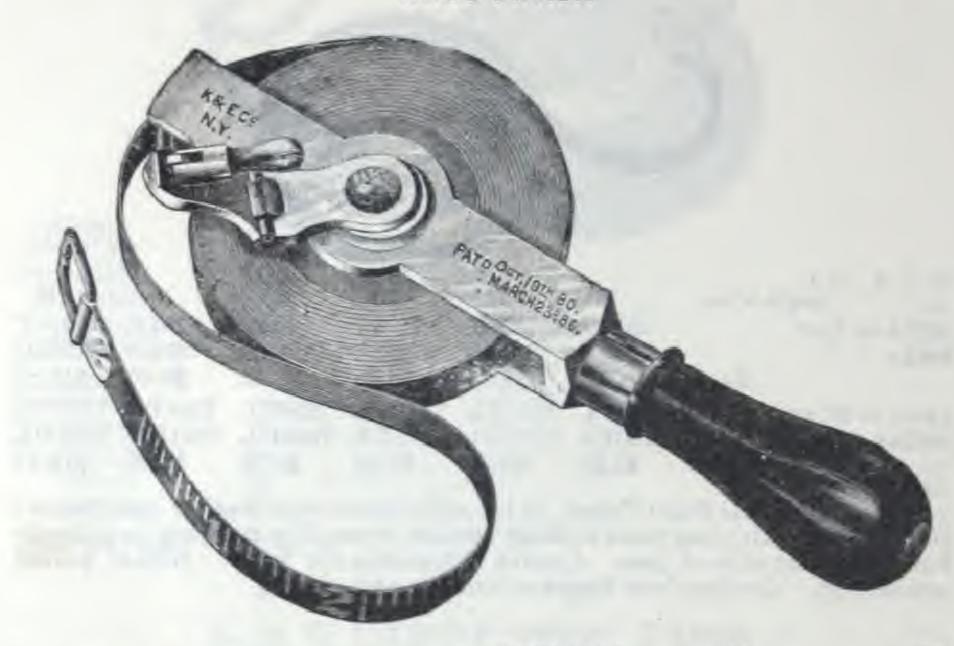
K. & E. HOME STEEL TAPES KECO FINISH



Leng	th ir	n feet	25	33	50	66	75	100
12ths of feet	+	4	7350T	7351T	7352T	7353T	7354T	7355T
10ths ''			7350D	7351D	7352D	7353D	7354 D	7355D
		Each,	\$3.20	\$3.40	\$3.90	\$4.85	\$5.10	\$6.60

K. & E. Home Steel Tapes, 1/8 in. wide, stout bent leather case, large centre, long folding handle. Centre adjustable for wear. Nickel plated mountings. Graduations begin at outside end of ring.

K. & E. STEVENS' STEEL MEASURING TAPES KECO FINISH



					Leng	th in f	eet	50	100
12ths of feet	9 11		+	+		6	-	7102T	7105T
10ths			411			4	4	7102D	7105D
	Each,			1	ě			\$7.15	\$12.85
12ths of feet	and Link	s						7102TL	7105TL
10ths ''	41 11							7102DL	7105DL
	Each,	9.		e	*			\$7.35	\$13.15
					Leng	th in N	leters	15	30
Metric (one	side only)						7102M	7105M
	Each,		4.	2-			4	\$7.15	\$12.85
Metric, othe	er side 12th	as of	feet					7102TM	7105TM
	Each,						1.	\$8.40	\$15.30

K. & E. Stevens' Steel Tapes, 1/2 inch wide, patent brass frame, patent centre, long swiveling flush folding handle, opened by pushing handle pin from opposite side of frame. Frame and all mountings nickle plated. Graduations begin on the line

K. & E. PICCOLO METALLIC TAPES



12ths of feet In. in eighths 7480T 7480T Metric (one side only)	10ths of feet to 100ths ft. 7480D 7480D Length	234	Size × 5/8 × 5/8		41/2	ight oz. oz.	Length 25 ft. 50 ft.	each,	\$1.55 2.00
7481M	10 meters	4		*	4		4	each.	\$1.70
7472M	15	à.	1	9				1.5	2.00

K. & E. Piccolo Metallic Tapes, 1/8 in. wide, stout bent leather case, large centre, long folding handle, centre adjustable for wear, all mountings nickel plated, line interwoven with metal, end re-enforced with leather. Graduations begin at outside end of ring

K. & E. ARMOR STEEL TAPES



Marked 10ths of feet	Mark 12ths of		Longth							
No. 7370D.	7370	T.	25 f	t.					each,	\$2.70
7372D.	7372		50 '						44	3.30
7374D.	7374		75 '						11	4.35
7375D.	7375	T.	100 '		1 10	+	-	4	1.6	5.60
Metric (one side only)	Length			(ot	Metric ther side s of fee		Le	ngth		
No. 7372M. 7374M.	15 meters	each,	\$3.30 5.00	No.	7372		15 m	eters	each,	\$4.50 7.00
7375M.	30 "	×.	5.60		7375	TM.	30	16	46	8.05

Tape 1/8 in. wide, strong steel case, large centre with long folding handle. Case and mountings nickel plated. Graduations begin at outside end of ring. Please order by number

K. & E. DARTMOUTH METALLIC TAPES



Le 12ths of fee	ngth in feet	25 7440T	33 7441T	50 7442T	60 7443T	75	100
10ths "		7440D	74+1 D	7442D	7443D	7444T 7444D	7445T 7445D
2.04300	Each,	\$1.65	\$1.95	4-6-6	17/02/16/1	0,0000	
			*******	*3.40			*****
12ths of ft.	and Links	7440TL	7441TL	7442TL	7443TL	7444TL	7445TL
10ths "		LATOLDIA			7443DL		
	Each,	\$1.75	\$2.05	\$2 55	\$2.95	\$3.25	\$4.10

K. & E. Dartmouth Metallic Tapes, 16 in. wide, stout bent leather case, long folding handle. Centre adjustable for wear, all mountings nickel plated. Line interwoven with metal, leather re-enforced end. Graduations begin at outside end of ring

\$2 55

\$2.95

\$3.25

\$4.10

EXCELSIOR ENGINEERS' TAPES WARD'S PATENT

			Leng	th in feet	50
Excelsior Engineer's Tapes, Ward's Patent	n	5.			7410
				Each.	\$3.25

Same quality as No. 7442, in bent leather case, long folding handle. Centre adjustable for wear. Graduations begin at outside end of ring. All mountings nickle plated, graduated for single-track road-bed, with Directions

The state of the s					Length	h in feet	50
Excelsior Engineer's Tapes	8		*	*			7411
						Each,	\$3.25

Like No, 7410, but Graduated for double-track road-bed

K. & E. MIDGET STEEL TAPES KECO FINISH

12ths of feet In. in 16ths	10th of feet to 100ths feet	Dimensions	Weight (about)	Length			
No. 7360T.	7360D	23/8×3/ in.	41/2 07.	25 ft.	5	each,	\$2.90
7362T.	7362D	27/8×34 in.	6½ oz.	50 ft.	2	11.5	3.40
7364T.	7364D	3¼×¾ in.	81/2 oz.	75 ft.	1	11	4.40
7865T.	7365D	3¼×¼ in.	10½ oz.	100 ft.		8.6	5.60

K. & E. Midget Steel Tapes, ¼ in. wide, stout bent leather case, large centre, long folding handle, centre adjustable for wear. Nickel plated mountings. Graduations begin at outside end of ring

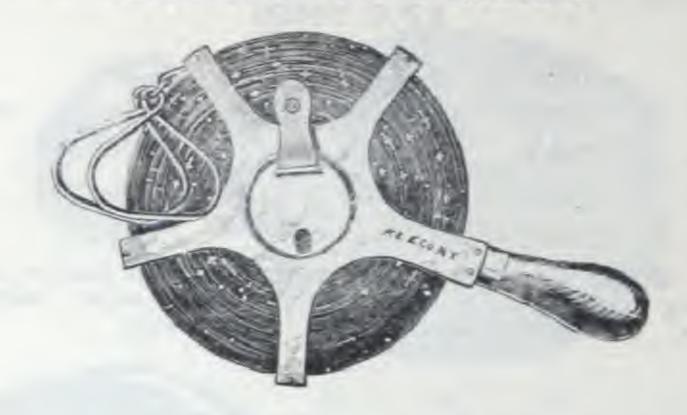


K. & E. ILLINOIS STEEL TAPES KECO FINISH

				- 9	Length	in feet	50	66	75	100
12ths of	feet						7302T	7303T	7304T	7305T
10ths	**		-	4	. 4 1		7302D	7303D	7304D	7305D
						Each,	\$5.80	\$7.75	\$9.25	\$11.65
				1	ength i	in Meters	15	20	25	30
Metric	(one si	de or	ily)		*		7302M	7303M	7304M	7305M
						Each,	\$5.80	\$7.75	\$10.00	\$11.65

K. & E. Illinois Steel Tapes, in wide, Paine's pattern, stout bent leather case, large centre with long folding handle. Centre adjustable for wear. Two handles for tape line. Nickel plated mountings. Graduations begin at end of line

CHAMPION BAND CHAINS



(5|3) (5|4) (5|5)

HEAVY BLUED STEEL RIBBON

7670B.	Superior q	uality	, 14 in.	wide,	100	feet		- each	\$6.75
7670C.	95	44.	11	1,6	200	11		(1	10.25
7670D.	4).	300	96	300	300	11		42	12.50
7670L.	X.4	10	-12	- 99	66	11 (100	links	1 11	6.00
7670BM.	Like 7670					Meters		- 61	6.75
7670CM.	7670				50	61			10.25

93 344 345 346

PLATED WITH WHITE METAL TO RESIST RUST

7671B.	Like	7670					100 feet			anal.	
7671C.	XI.	*1					200 "			each,	2000
7671D.	4.1	111		-				1.5	8	- (1)	10.25
			1.0	4.	6	2	300 "	.91		9.5	12.50
7671L.		166	-1		-		66 " ()	100 lin	ks	46	6.00
7671BM.	3.6	7671					25 Meter		-	771	
7671CM.	310	11					28 107070		7		6.75
1312 - 34.				- 2	8	(6)	50			4.5	10.25

Above Band Chains with one extra sub-divided foot before zero, furnished to order without extra charge

EDDY'S STANDARD STEEL MEASURING TAPES

In Leather Covered, Metal Lined Cases, Flush Handle



210.	¼ inch wide	, 35	feet	4	×	9.1		9			each	\$ 5.50
211	3.6	50	ir						5		9.6	8.00
212.	94	66	ni.							4	14	10.00
213.	14	75	44				4	2			44	12.00
214.	- 16	100	d	4					*		**	15.00
300.	3% inch wide	, 25	ii.		10		4		*		**	5.00
301.	alligast an	33	in .								11	5.50
302.	-10	40	110	4	4			i	-		16	7.00
303.	161	50	16	400	1	1					H.	8.00
304.	-16	66	**					*	4	-	11.	10.00
305.	(44)	75	16	*	4						44	12.00
306.	-66	100	16	+			*	4			14	15.00

Graduated in 10ths or 12ths of a foot or metric measure

EDDY'S, PAINE'S PATENT, STANDARD STEEL MEASURING TAPES



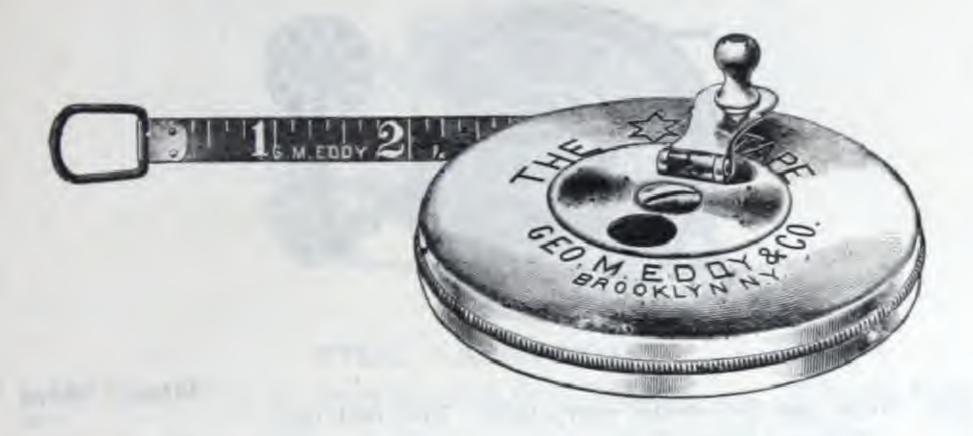
204.	25	feet,	¼ in	ach wide	4			4	130	each	\$3.50
205.	33	**	14	15					*	44	4.50
206.	50	14.	14	9					*	-84	6.00
207.	66	44	34			4	i.			44	8.00
208.	75	44	14	110		2.	4		4	11	10.00
209.	100	R4	4	46						- 616	12.00

In Iron Cases, Brass Bound, Morocco Covered, Improved Handle

All orders for Steel Tapes will be marked in 12ths unless otherwise directed. These Tapes are not marked in Links unless specially ordered

These Tapes are graduated in 10ths and 12ths, and are detachable from the case, and are furnished with detachable rings to avoid breakage

EDDY'S STAR STEEL MEASURING TAPES



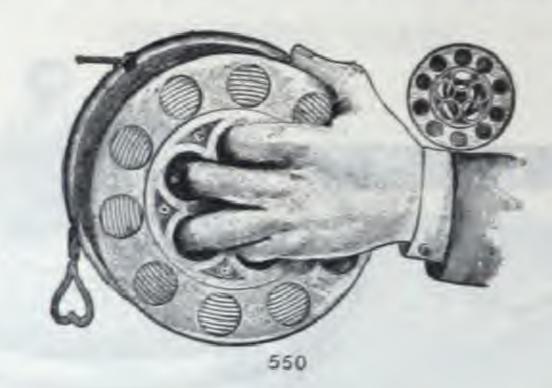
500.	50	feet,	1/2 inch wide			+				each	\$4.50
501.	66	23	11		16		(8)		1	10	5.50
502.	75	10	" 10	*	7.					.01	6.50
503.	100	10	11							66	8.00

EDDY'S STANDARD IMPROVED STEEL MEASURING TAPES

210.	33 1	feet,	¼ inch wide	1135		1		each,	\$5.50
211.	50	11	.16				 4	4.1	8.00
212.	66	11	14				efin	34	10.00
213.	75	24						16	12.00
214.	100	11	**		3		1 .	**	15.00

In Leather Covered Cases, Flush Handle

ROE'S HEAVY TAPE CHAINS



550.	Tape one inch wide, every foot. End feet in		50 Feet	100 Feet
	10ths or 12ths, Plain Tape one inch wide, every foot. End feet in	each,	\$8.50	\$12.50
550.	Tape one inch wide, every foot. End feet in	11	9.25	14.00
551.	Tape 14ths inch wide, every foot. End feet	2.6	10.00	15.00
551.	Tape 14ths inch wide, every foot. End feet	a	7.50	11.00
	Tape 14ths inch wide, every foot. End feet	12	8.75	12.50
	Tape 58ths inch wide, every foot. End feet	- 66	9.50	13.50
552.	Tape %ths inch wide, every foot. End feet	28	6.50	9.50
552.	Tape %ths inch wide, every foot. End feet	10	7.75	11.00
	in 10ths or 12ths, Aluminum Plated	10	8.50	12.00

Roe's Extra Strong and Heavy Tape Chains. These are Extra Wide, Thick and Strong, with Heavy Swivel Handles, on our Patent Long Island Reel. They are used extensively where Tapes receive the hardest and roughest kind of usage, especially in the mines and mountains. It is almost impossible to break these tapes without you use a hammer. They are graduated by Brass Rivets and Figures; exactly the same as our Tape Chains on our Patent Electric Reel.

MEASURING CHAINS



6451

STEEL U.S. STANDARD

6400.	Steel,	W.G. 12,	Brass Hand	les, Oval	Rings,		50 ft.	each,	\$4.50
6401.	44	12,	**	**			100 ft.		8.00
6402.	-11	12.	44				33 ft.	4.6	3.50
6403.	3.6	12.	11	44			66 ft.	44	6.50
6410.	44	12.	40	Brazed Li	nks and	Rings,	50 ft.	16	6.00
6411.	11	12.	**	64			100 ft.	4.6	11.00
6412.	10	12,	- 11	18			33 ft.	66	5.50
6413.	11.	12,		- 11	- 1	4	60 ft.	4.6	10.00

Chain 6411 has a spring hook (snap) at 50 feet, so that it can be seperated there and the handle attached for using it as a 50 foot chain

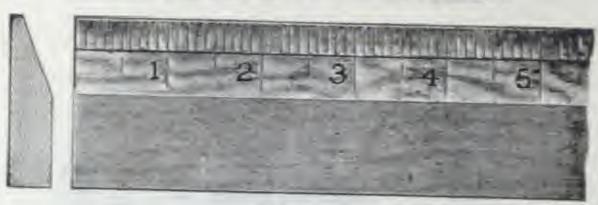
STEEL, METER AND VARA

6420.	Steel.	W.G. 12.	Brass	Hand	lles, Oval	Rings,		10	Meter	each,	\$3.50
6421.		12.		1.6	144			15	14	1.1	5.00
6422.	111116	12.		11	er.			20	-11	1.0	6.20
6424.	118	12		15	Brazed Lin	ksand	Rings.	10	11	11	5.50
6425.		12.		-11	1.1	- 0		15	44	6.6	7,50
6426.	110	12.		46	166	7.6	DI , .	20	11	44	10.00
6427.		12.		**	(6	11		25	11		12.50
6430.	11	12.		66	Oval Ring	s. 10 V	aras .	200		116	3.50
6431.	14	12,		44	11	20	60		3.	64	6.50
6434.	11	12,		114	Brazed Lin	ksand	Rings.	10	Varas	14	5.50
6435.	45	12,		**	11	TED WITH	16	20	11	11	10.00
						MARIA					

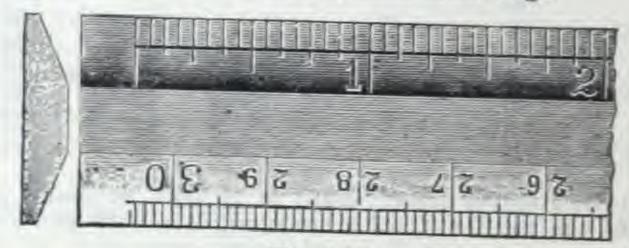
IRON, U.S. STANDARD

6440.	Iron.	W.G.	8.	Brass	Handl	es. 2	Round	Rings,	50	feet	each,	\$2.50
6441.	1,011,	11	8.		**		4.0		100	- 14		3 50
6442.		11	8		14		11		33	-64	44	2.00
6443.		14	8.		d		44		66	14	16	3.20
6450.		11	8		- 10	3 Sa	wed O	val Ring	s 50	4.0	65	3.50
6451.		10	8		- 96	0.00	16	46	100	D.	(1	5.50
6452.		44.	8.		116		14	11	33	11	44	2.70
6453		u	8,		**		**	**	66	-11	3.6	4.25

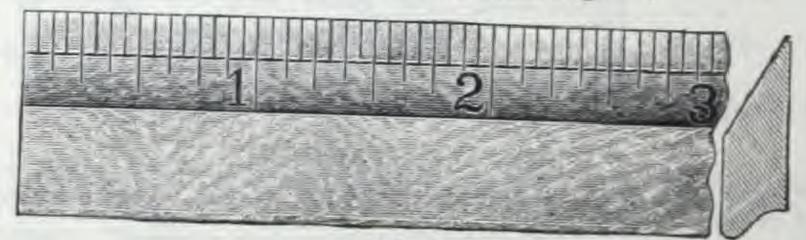
MAPLE SCHOOL RULES



NO. 84



NO. 86XX

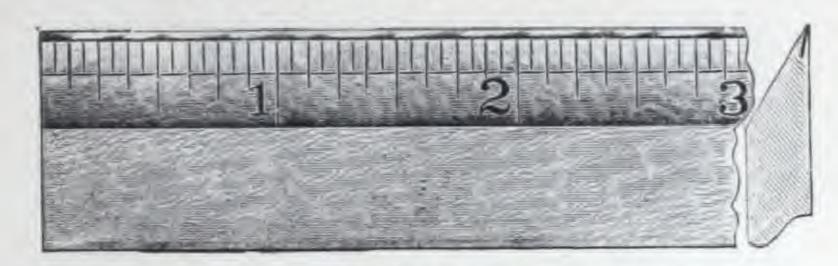


NO. 75

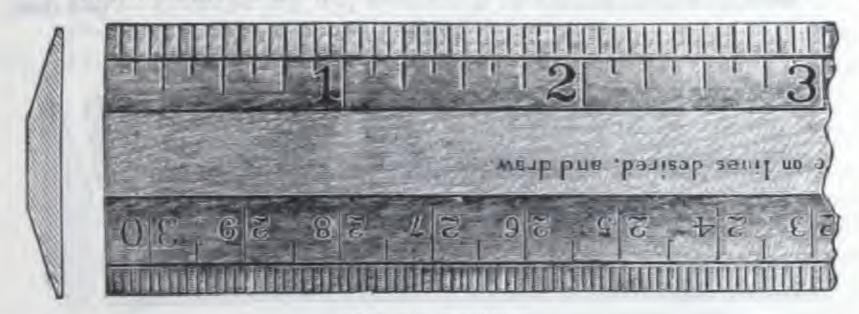
No. 75. 12 in., Maple, 15 in. wide 12 in. thick, beveled, plain edge, varnished, natural wood color, Inch Scale divided into sixteenths. 2 doz. box.

15 in., same as above.

Maple School Rules - continued

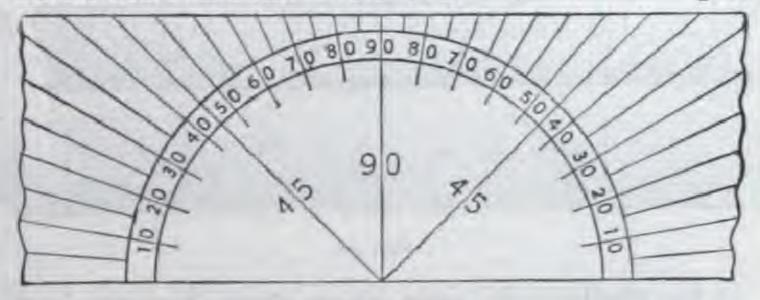


NO. 76



NO. 61, FRONT

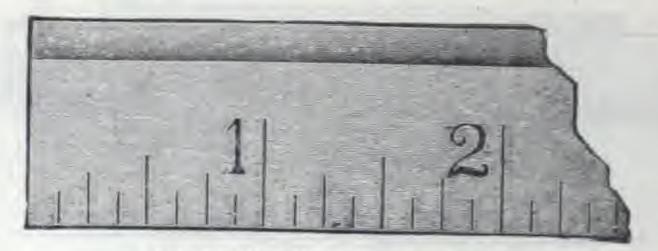
No. 61. 12 in., Maple, 1% in. wide, 3 in. thick, double bevel, plain edge, varnished, natural wood color, Inch Scale, divided into sixteenths on one edge, Metric Scale divided into centimeters and millimeters on the other, and Protractor Scale on back. 2 doz. box per doz., .40



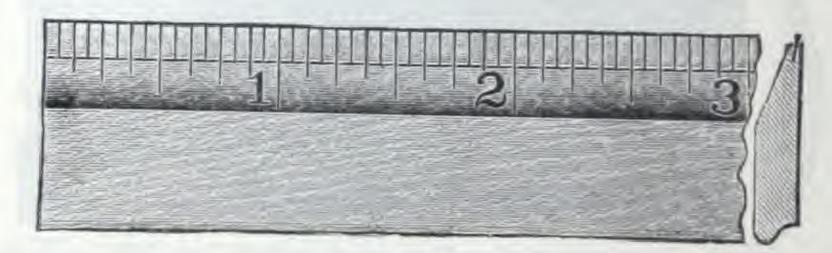
NO. 61. BACK

No. 616. 12 in., same as No. 61, with brass edge . .

Maple School Rules - continued

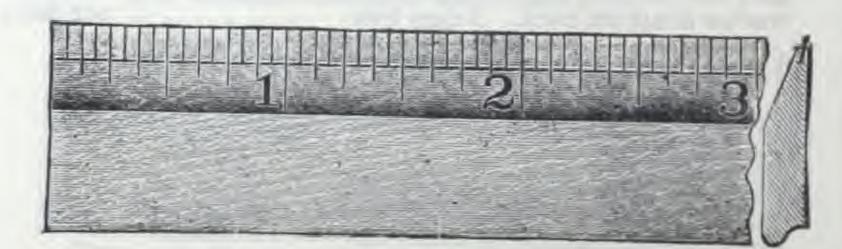


NO. 25XX AND NO. 256, BACK



NO. 256

No. 256. 12 in., same as No. 25XX, brass edge, 1 doz. box per doz., .00



NO. 24

No. 24. 12 in., Maple, % in. wide, in. thick, beveled, brass edge, varnished, Inch Scale divided into sixteenths.

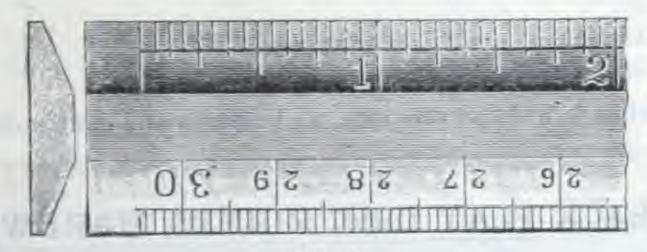
1 doz. box per doz., .50

BOXWOOD SCHOOL RULES



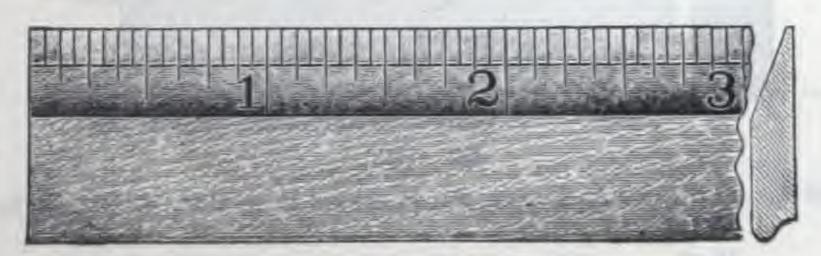
NO. 94

No. 94.	12 in., Boxwood, ¾ in. wide, 3 in. thick, bedge, hand rubbed finish, Metric Scale divid meters and millimeters on bevel, Inch Scale	ed int	co centi-	
	sixteenths on back. 1 doz. in box			.75
946.	12 in., same as No. 94, with brass edge .		11	1.00
26.	12 in., same as No. 94, with Inch Scale divi	ded in	ito six-	
	teenths on bevel and into eighths on back			.75
266.	12 in., same as No. 26, with brass edge .	4	- 11	1.00



NO. 96

No. 96.	12½ in., Boxwood, 3 plain edge, hand rub sixteenths on one edge meters and millimeter 1 doz. in box	bed finish ge, Metri	s Scale other	divid	e divide led into 1. blank	d into	\$1.25
966.	121/2 in., same as No.	96, with	brass e	edge		16	1.75



NO. 25XX, FRONT

A. W. FABER'S FLAT RULERS

meters 14 1/2	La Balata	substitute in	A POSTOR	PACHERINE.	A ATTENDATE	PARTITION OF THE PARTY OF THE P
-0-		-		7 19	19	110 , 15
			AN FIRST			

NO. 1640 S.B.

No. 1640S B. 12 in., Natural Polished, Single Beveled, Plain Edge each, 30

15 "

18 "

21 "

45

Dacross	10	BORDERS OF STREET	CONTRACTOR OF STREET	700 PROPERTY.
-		A IA IS IS IN IN COLUMN	A 100 M 10 M 10 M	B. M. B.
		I THERE		
				-

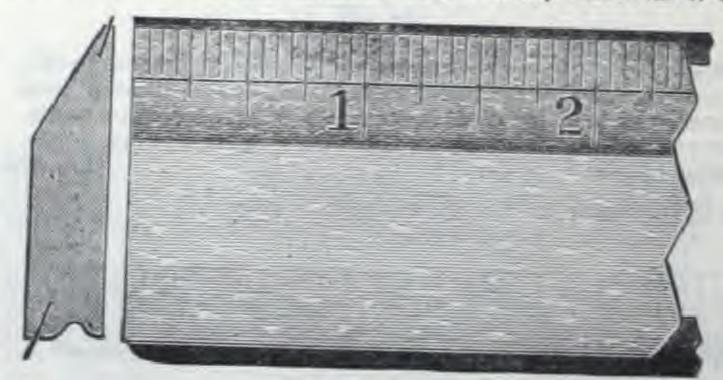
NO. 1640 D.B.

No. 1640D.B. 12 in., Natural Polished, Double Beveled, Plain Edge esth, .40

18 " " .50 21 " " .60

Divided inches to 32ds on one side, and meters and centimeters on the other

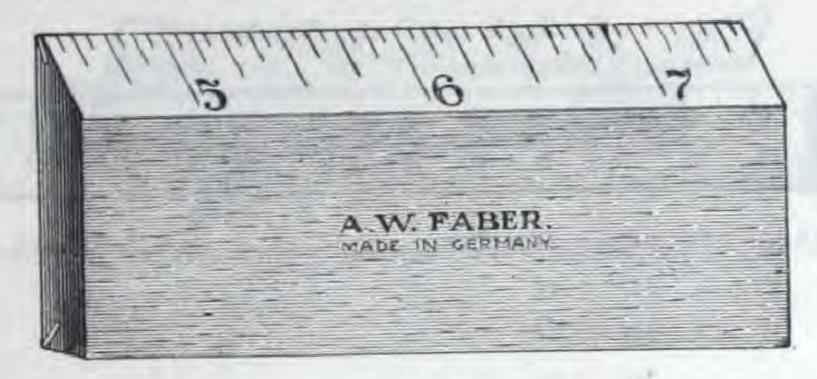
STEEL BACK FLAT DESK RULERS, HARDWOOD



NO. 36XX

No. 36XX. 12 in., Piano Polish, Brass, Bevel Edge doz., \$2.25 each, .20

A. W. FABER'S FLAT BRASS EDGE RULERS



1610 S.B.

1610. 12 inch, Natural Polished, White Enameled Beveled Edge each, .30



1690 S.B.

1896. 12 inch, Natural Polished, White Enameled Beveled Edge each, .40

15 " " .50

18 " " .60

21 " " .70

No. 1690 has a better finish than 1610

SHRINKAGE RULES

For Single and Double Shrinkage

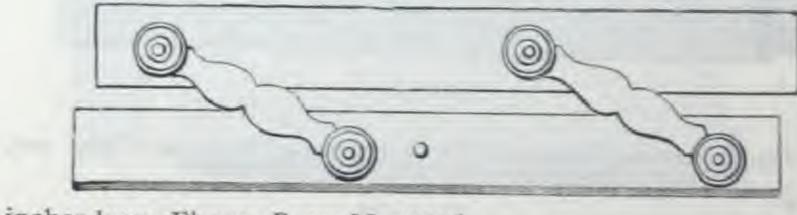
8.3	33 13 02 2 3 4	61 Account to I me		19	Đ 20	21	22	23	1
a helefilidada hala	Antifateletata bibataka	ladatah delah	الماسلىية (سا	illa (illa	uslida	lalidat	<u>abilali</u>	bilatal da	
Shrinkage Ru	ale, $24\frac{2}{76} = 24$	inches				-		each,	\$1.20
15	241 = 24	40	4.0	1.0			4	44	1.20
10	$24\frac{4}{8} = 24$	144	4.	4			-	111	1.20
11	$24\frac{1}{4} = 24$.00	-				4	44	1.20
- 11	25 = 24	7.64			4			16	1.20
11	$25\frac{1}{4} = 24$	- 94						161	1.20
-11	26 = 24	.14						di	1.20
16	264 = 24	10						11	1 00

Rules to any other shrinkage made to order; prices on application

1.20

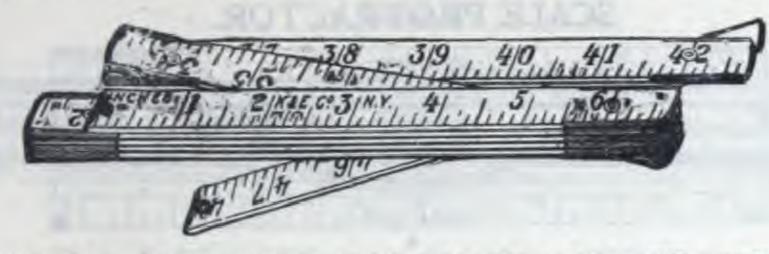
These Shrinkage Rules are of Hardwood, Brass Tipped, about 11/2 inches wide by 1/8 inch thick, and divide to one eighth, one tenth, one twelfth and one sixteenth inches. They are superior to all others in quality, accuracy and finish

FOLDING PARALLEL RULES



6 in	ches long	Ebony, Bras	s Mounted		140	-			each, .50
12	10	44	14				100	+	.70
15	110	44	11	-	-			-87	.90
18	111	**		4	100	+	4		" 1.10
	16		**	10.	6		-	-	" 1.50
24	-		14	*	4.1		-		" 2.25

ENGINEERS' AND CONTRACTORS' POCKET RULES



1'ARDWOOD, YELLOW FINISH, SPRING JOINTS, METAL TIPS, % IN. WIDE

io. 1.	Yellow,	2	ft.	, 4	fold,	div. 18 × 15 in.		3		each	, .25
2.	41			6		11				14.	.35
3.	CP.	4	**	8	11	- 61				14	.50
4.	5.6	5	11	10	- CE			1		4.0	.60
5.	- 0	6	n	12	10	11				LE	.75
6.	46	8	11	16	14	(6				44	1.00
7.	= 0	4	11	8	110	div. 1 × 1 in.				11	.50
8.	40	4	26	8	16	div. 1 × meter				11	.50
9.	1 (4)				11	div. 18 x 16 in.	an	d Tab	les	37	.75
10.	4.6	2	- 11	6	10	15				5.0	.30
11.	41	3		9	44	16				64	.45

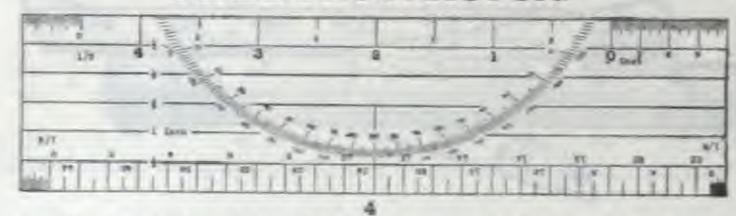
HARDWOOD, WHITE IVORINE FINISH, SPRING JOINTS, METAL TIP 1/2 IN. WIDE

No. 12.	White Ivorine	2	ft.,	4	fold,	div. 16 × 16 in.			each	, .40
13.	16	3	44	6	11	14	×	-	"	.50
14.	11	4	16	8	15				61	.60
15.	**	5	16	10	1.0	16			41	.75
16.	40	6	12	12	11	**			41	.90
17.	44	8	11	16	11	- 11		4	66.	1.20
18.	10	4	11	8	14 1	div. 16 in. × 100 ft.		1.2	44	.75
19.		6	1.0	12	16	ir ii	+	+	6.5	1.15
20.	14	4	46	8	44	div. 16 in. × mm.	i.		**	.60

All Rules are divided on both sides, and read from right and left

These Rules are made of a flexible and light hard wood, prepared in a manner to prevent shrinkage, hence they are absolutely accurate. They are constructed much thinner than the old style Rules and without the shar, metal edges, therefore they are more convenient to carry in the pocker.

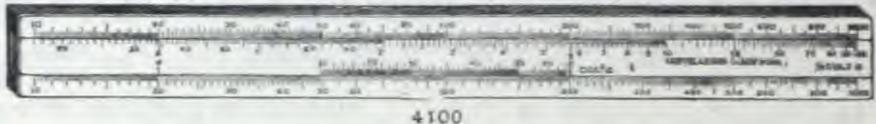
TRANSPARENT PARALLEL FLEXIBLE RULER AND SCALE PROTRACTOR. .



No. 1. For Civil Engineers and Surveyors. Divided 10 and 20 parts to the inch each, .20 No. 4. For Architects and Mechanical Engineers. Divided 1/8, 14, 1/2, 1, each, .20 No. 5. For Students of Mathematics, Schools, etc. Divided 8ths, 16ths, 32ds, Centimeters, each, .20

For use by Students of Mathematics, in schools and for drawing and sketching purposes generally. It is 11/2 × 6 inches, made of celluloid. transparent as glass and flexible as rubber. With it lines can be drawn paralle' with, or at any angle to each other without measuring. Just fits the note book or pocket. Convenient for Civil and Mechanical Engineers, Architects, etc., for recording field notes and making sketches.

K. & E. STADIA SLIDE RULES



Stadia Slide Rule, engine divided, 10 in. divisions on 4100. white facings, in Case with Directions . . each, \$ 4.50 Stadia Slide Rule, engine divided, 20 in., divisions on white facings, in Case with Directions . . ,

The Stadia Slide Rule is especially designed to solve the two equations generally used in stadia measurements, viz. :

Height = Stadia Distance × Sin 2 a Distance = Stadia Distance X Cos. 2 a and

These two equations can be read off on the face of the rule with one setting. It is finely graduated and will be found of great use to the Topographer, as it enables him to compute quickly the results of his labors in the field

K. & E. MANNHEIM ADJUSTABLE SLIDE RULES

Patented



NO. 4041

4031.	K. & E. Patent Adjustable Mannheim Slide Rule,	
	5 inches, engine divided, divisions on white facings, with Glass Indicator, in Sewed Leather Case, with	
	Directions	

This rule is sub-divided as closely as the 10-inch rule, No. 4041

4035.	K. &. E. Patent Adjustable Mannheim Slide Rule,
	8 inches, engine divided, divisions on white facings, with Glass Indicator, in Sewed Leather Case, with
	Directions

This rule is sub-divided as closely as the 10-inch rule, No. 4041

4041.	K. & E. Patent Adjustable Mannheim Slide Rule,										
	10 inches, engine divided, with Glass Indicator, in		4.4								
	with Directions		each, \$4.50								

4041F.	K. & I like 4					-	
	rule						each, \$8.00

4045.	K. & E. Patent Adjustable Mannheim Slide Rule, 16 inches, engine divided, divisions on white fac-									
	ings, with Glass Indicator, in Morocc	0 (Cover	ed						
	Case, with Directions ,	,			each, \$10.00					

4051.	K. & E. Patent Adjustable Mannheim Slide Rule, 20 inches, engine divided, divisions on white fac-						
	ings, with Glass Indicator, in Morocco Covered						
	Case, with Directions each, \$12.50						

4052D.L.	Glass	Indicator,	with	two	Hairlines	(ins	tead	of		
0.00	10 St (4 - 14)	extra .							each,	.20

The same, but with	two Hairlinesspaced	toastated ratio,	extra	111	.40
--------------------	---------------------	------------------	-------	-----	-----

Rules 4041F., 4045 and 4051 are divided more closely than the others. They have from 200 to 20 sub-divisions between the prime numbers, while the other rules have from 100 to 10, so that reading is closer by at least one figure

K. & E. ADJUSTABLE POLYPHASE SLIDE RULES

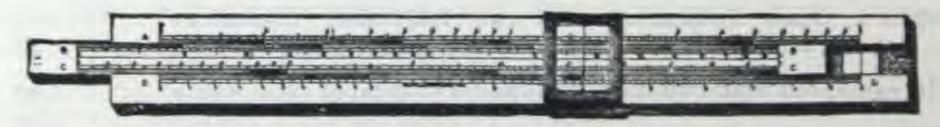
Mannheim Style

Patented



NO. 4053-3

K. & E. STUDENTS' SLIDE RULE

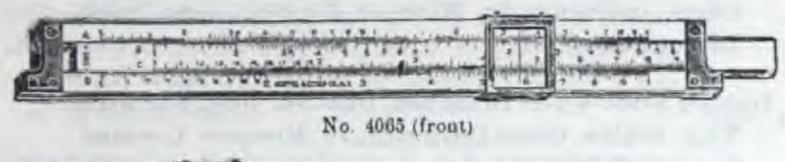


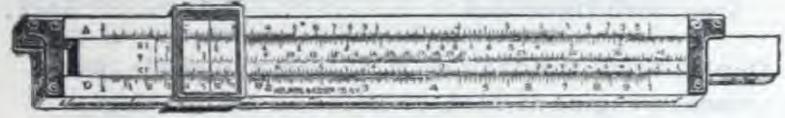
4058

4058. Students' Slide Rule, Mannheim, 10 inches. with Indicator and Directions each, \$1.00

K. & E. ADJUSTABLE DUPLEX SLIDE RULES

Patented





	No. 4065 T (back)		
4061.	Duplex Slide Rule, K. & E. Patent Adjustable, 5 inches, engine divided, divisions on white facings, Glass Indicator, in Sewed Leather case, with Direc-		
4061T.	Duplex Slide Rule, 5 inches, like No. 4061, but with Trig. Scales, Glass Indicator, in Sewed Leather Case, with Directions		\$5.00 \$6.50
4065.	Duplex Slide Rule, K. & E. Adjustable, 8 inches, engine divided, divisions on white facings, Glass Indicator, in Sewed Leather Case, with Directions	each,	\$5.00
4065T.	Duplex Slide Rule, 8 inches, like No. 4065, but with Trig. Scales, Glass Indicator, in Sewed Leather Case, with Directions	each,	\$6.00
4071.	Duplex Slide Rule, K. & E. Patent Adjustable, 10 inches, engine divided, divisions on white facings, Glass Indicator, in Morocco Covered Case, with		
1071T.	Directions	each,	\$5.00

Trig. Scales, Glass Indicator, in Morocco Covered

Case, with Directions . . . each, \$6.50

K. E. Adjustable Duplex Slide Rules-continued

- 4083. Duplex Slide Rule, K. & E. Patent Adjustable, 16
 inches, engine divided, divisions on white facings,
 Glass Indicator, in Morocco Covered Case, with
 Directions each, \$12.00
- 4083T. Duplex Slide Rule, 16 inches, like No. 4083, but with
 Trig. Scales, Glass Indicator, in Morocco Covered
 Case, with Directions each, \$15.00
- 4087T. Duplex Slide Rule, 20 inches, like No. 4087 but with
 Trig. Scales, Glass Indicator, in Morocco Covered
 Case, with Directions each, \$18.00

In the "Duplex" Slide Rule the slide is of the same thickness as the rule and has its two faces flush with those of the rule. The rule and slide are fully graduated on both sides, scales A and D being alike on both sides of the Rule, whereas scales B and C on the arithmetical slide are graduated on their upper face in the usual way like A and D, but on their under face in reversed order, the initial indexes being on the right hand, and the scales progressing toward the left. The index of the scales of one face are in alignment with those of the other face, and a runner, encircling the whole Rule, enables coinciding points on any scales of either face to be at once found. This improvement greatly simplifies working out many complex calculations, for example

$$a \times b \times c = x$$
; $= x$;

may be performed with one setting. Besides, there is on the Duplex Rule an inverted slide always in position, with the numbers right-side up and the corresponding scales contiguous, instead of the numbers inverted and scale C next to A and B next D.

To still further increase the value of the Duplex Rule we furnish it also with Trigonometrical Scales, Sines, Tangents and Scale of equal parts, in addition to the arithmetical scales enumerated in the above description. In this form the Scale of Sines and of Tangents are each on one side (face) of the slide, on the median line, and the scale of equal parts is on the front face of the rule under the D scale. The S and T scales and the scale of equal parts are read by means of the indicator. The rules having these additional scales are designated as "with Trig. Scales" in this list

each, \$7.00

K. & E. ADJUSTABLE POLYPHASE DUPLEX SLIDE RULES

Patented

38-2.	Polyphase Duplex Slide Rule, K. & E. Patented Adjustable, Sinches, engine divided, divisions on white facings, Glass Indicator, in Sewed Leather Case, with Directions
38-3.	Polyphase Duplex Slide Rule, K. & E. Patent Adjust- able, 10 inches, engine divided, divisions on white facings, Glass Indicator, in Morocco Covered Case,

& E. ADJUSTABLE LOG LOG DUPLEX SLIDE RULES

Patenter

with Directions .

22. Log Log Duplex Rule, K. & E. Patent Adjustable, 10 inches, engine divided, divisions on white facings, Glass Indicator, in Morocco Case, with Directions . each, \$8.00

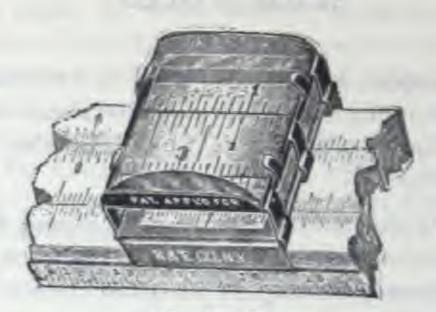
CASES FOR SLIDE RULES

procco Covered Case f	or	ea	10 in. ch, .40	16 in. .60	20 in. .80
wed Leather Case for	5 in.	8 in.	10 in.	16 in.	20 in.
ea	ch, .70	.80	.90	1.10	1.40
wed Leather Case, wi	th space fo	or Magnifi	ier No. 408	5,	
for	5 in.	8 in.	10 in.	16 iu.	20 in.
eacl	h, \$1.20	1.30	1.40	1 80	2.10

BOOKS ON THE SLIDE RULES

7B.	"The Slide Rule," complete Manual, by Wm. Cox, (furnished with Mannheim Rules)	each,	50
7E.	Directions for Duplex and Mannheim Rules, bound together, (furnished with Duplex Rules)	11	.50
7D.	Mannheim Manual (B.), and Directions for Duplex Rule, bound together		.75

MAGNIFIERS FOR SLIDE RULES



No. 4085 B.

4085A.	Magnifiers for Mannheim Slide Rule, 5 in., 8 in each, \$2.00
4085B.	Magnifiers for Mannheim 10 in., 16 in., 20 in., Poly- phase, Favorite, Duplex 5 in., 8 in., 10 in., Stadia 10 in., 20 in. Slide Rules
4085C.	Magnifiers for Duplex 16 in., 20 in., and Log Log, Slide Rules
When	ordering please state for which kind of Slide Rule Magnifier is

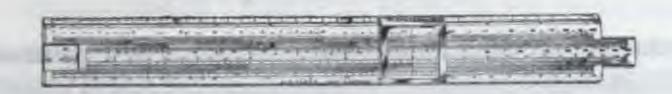
INDICATOR WITH DECIMAL POINTER



No. 4086

4086.	Glass Indicator with Decimal Pointer each, \$1.00
	The same, in place of plain Glass Indicator, add
No.	4086 is furnished for the Mannheim style of Slide Rules only
The	Magnifiers No. 4085 do not fit on these Indicators

A. W. FABER'S IMPROVED CALCULATING RULE



350.	A. W. Faber's	Calculati	ng Rule,	Plain Boxw	ood, 10½	111.	each,	\$3.45
360.	-44	n.	11	Celluloid F	ace, 101/2	4.5	():	3.45
365.	14	**	- 14	Li	10 1/2	3	(3)	3.90
367.	**	11	31.		101/2	14	100	4.20
378.	-0-	9	ii.	- CH	10 1/2	14	15.5	4.80
380.		11	66	66	20	66	64	13.50

The Slide Rule has been defined as "an instrument for mechanically effecting calculations by logarithmic computation" (Pickworth, The Slide Rule), and it is said that "by its aid various arithmetical, algebraical and trigonometrical processes may be performed with ease and rapidity, the results obtained being sufficiently accurate for almost all practical requirements"

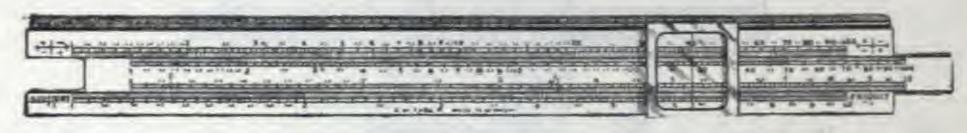
The A. W. Faber Calculating Rule consists of a "stock" or "body" about 10 inches in length, 1% inches in width, and % inch in thickness, a movable strip or "slide" inserted into the "body," surfaces level, and a "runner about an inch square fitted with glass, which, sliding freely the entire length of the instrument, serves to connect the fine graduations of the several scales in the "body" and "slide." The rule is made of boxwood, with or without celluloid facings

While the plain boxwood rule is the more durable, the rule with celluloid face can be more easily read, and is on that account often preferred

A Manual or Book of Instructions, of 35 printed pages and 12 diagrams accompanies each rule, explaining the general principles which govern the instrument and furnishing practical illustrations of its usefulness

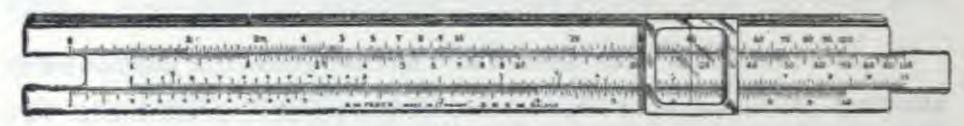
A. W. FABER'S IMPROVED CALCULATING RULE

With Self-Adjusting Slide



NO. 363

No. 363. Calculating Rule with decimals marked and with Slide
Spring and Ordinary Cursor, 11 inches long, celluloid
surface each, \$4.50
363A. Same as 363, without lateral lines 4.50



NO. 364A

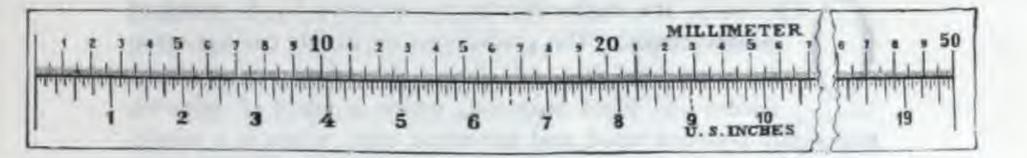
A. W. FABER'S

SUNDRIES FOR IMPROVED CALCULATING RULES

No. 777.	Sole Leather	Case f	for Cal	culat	ing	Rules	Nos.	350	to 367	each,	\$1.15
778.	Cardboard	11		10	-	11	**	350	to 36	1 46	.35
779.	**	3.3		6.6		11	11	380		. 11	.65
Bookson	Instruction s	eparat	ely, fo	r Cal	cula	ting I	Lules	, En	glish,		
Ger	man, or Frenc	ch Lan	guage	s			. *			. 44	.75
Metal R	unners with g	class, f	or Nos	350	, 360), 363,	364,	365			.50
Metal R	unners with	glass, f	or No	s. 367	7, 38	0		12.1		. 55	.65
Glass fo	r runners .									. "	.30
Wooden	Springs for I	Rules,	Nos.	363, 3	864, 8	365, 36	7				.25
Wooden	Springs for I	Rules,	No. 38	80		3.	411			. 11	.35
Tables o	of Constant Va	lues								. 1	Gratis

PAPER SCALES

Engine Divided. Printed on Bristol Board, 19x1 1/4 Inches



Paper Scales as in Series A, B, or C	each,	.20
Separate Scales, div. 2, 4 inches to the foot, 66 parts per inch,		
or inches in sixteenths	46	.20
Meter and Inch Comparing Scale, 1/2 meter long	81	.30
Meter Scale, div. in millimetres, 1/2 meter long	16	.20
Scale of Proportional Inches, 1/8, 1/4, 1/2, 1, 12 in. long	11	.10
Series A, 6 in Set, div. 14, 1/2, 14, 1, 11/2, 3 inches to the foot	per set,	1.00
Series B, 6 in Set, div. 32, 1/8, 78, 78, 1/8, 1/8 inches to the foot	441	1.00
Series C, 6 in Set, div. 10, 20, 30, 40, 50, 60 parts per inch		1.00

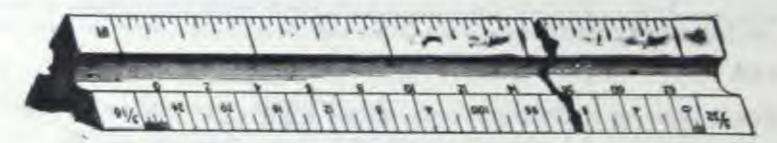
TRIANGULAR SCALE GUARDS



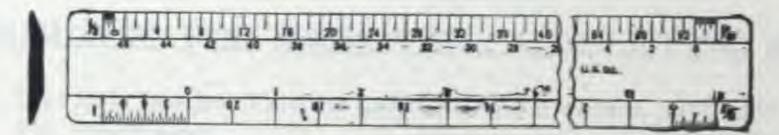
Patent Triangular Scale Guard, German Silver . . . each, .25

DRAUGHTING SCALES.

UR scales are engine-divided to accurate U. S. standard measurements. The graduations are deeply cut but are at the same time fine and clear. We make two kinds of scales; the plain boxwood, which is made of selected, thoroughly seasoned wood, and the white edge, which is a combination of boxwood and celluloid. The white edge scales meet with much favor, as they tire the eyes less than either boxwood, ivory or metal scales, the graduations and figures being very distinct,—black on a white ground. Both the boxwood and white edge scales are made in the various shapes here described.



The triangular scale has the merit of possessing six surfaces for graduations, which is an advantage for anyone who desires the greatest range with one piece, but is objected to on account of its obstinate tendency to present the wrong scale, and the annoying trouble of turning it over and over to obtain the one desired.



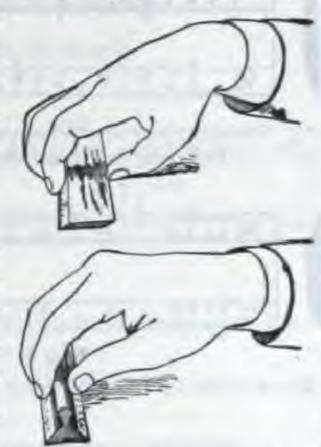
The regular shape flat scale has two bevels for graduations, and if these are different and the wrong one is presented it requires but one change to bring the desired one. The graduations are more convenient to read than on the triangular scale, and are not subjected to as much wear, as the graduated surfaces do not come in contact with the paper.

The double bevel scale has four bevels for graduations, but requires to be held up when in use in order to bring the edge to the paper.

The opposite bevel scale is an improvement on the

regular flat shape in that it may be more readily picked up, and in presenting but one graduated bevel to the eye when in use. It is furnished at the same price as the regular shape, and when desired should be specified thus:
"No. 2411, opposite bevel, \$0.75."

The shape here illustrated is preferred by many on account of the handle, which makes it a convenient scale to use. It has two bevels for graduations, and any flat scale in our list will be furnished in this shape at an additional cost of 25 cents. When



desired it should be specified thus: " No. 2711, special shape, \$1.50."

Special Scales.

We are prepared to graduate special scales to order from customer's specifications, which should include

Material,
Length,
Sectional shape, and
Sketch showing figured graduation.

Prices will be quoted on receipt of information as above.

If, however, the desired plan of graduation be one of the following four, the necessity of a sketch and price quotation may be avoided, and the order given as follows:

"Flat boxwood (or white edge) scale; 12 inch; 11/2 inches to the foot; arranged like Fig. F."



FIG. D. OPEN DIVIDED.

Different scale on each bevel; reading left to right.

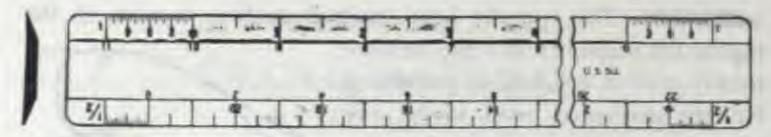


FIG. E. OPEN DIVIDED.

Different scale on each bevel; reading both ways.

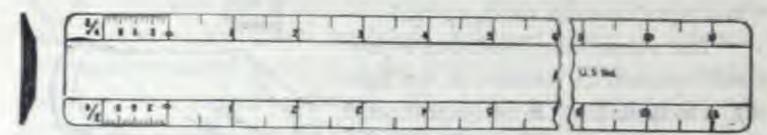


FIG. F. OPEN DIVIDED,

Same scale on both bevels; one left to right; other right to left.

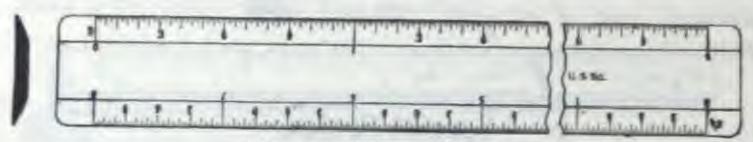


FIG. G. FULL DIVIDED.

Different scale on each bevel; reading left to right.

The illustrations are merely intended to show four different plans of graduation and figuring, and any scale of graduation may be ordered arranged like either illustration.

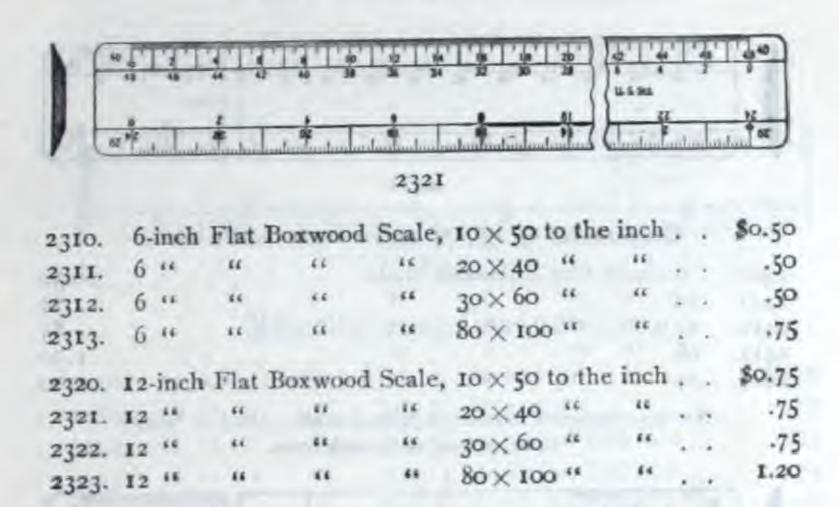
Prices.

Arranged like Figs. D., E. or F.	
12-inch Flat Boxwood Scale	\$0.85
12-inch Flat White Edge Scale	1.35
Arranged like Fig. G.	
12-inch Flat Boxwood Scale	\$1.00
12-inch Flat White Edge Scale	1.50

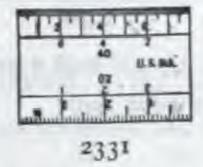
The sectional shape as shown in illustrations will be sent unless otherwise specified.

FLAT BOXWOOD SCALES.

Engine Divided, U. S. Standard.



Offset Scales.



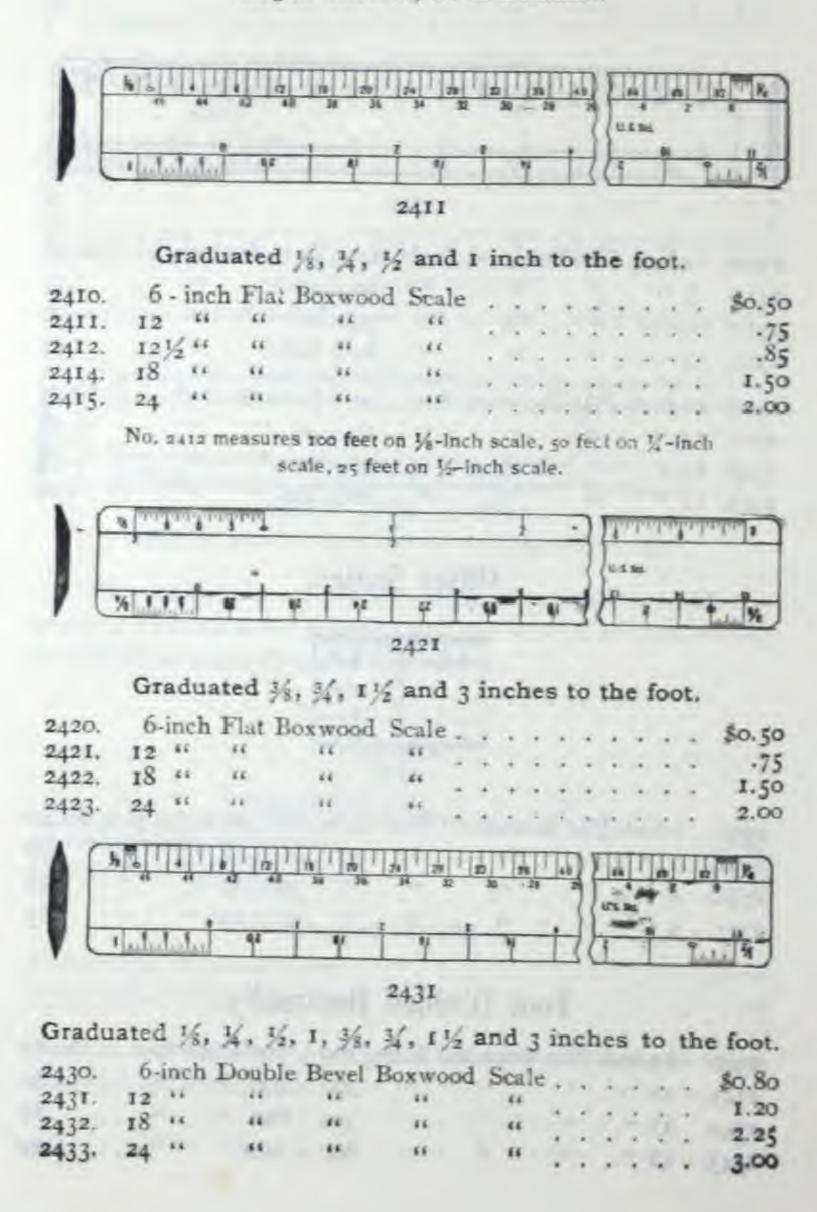
2330.	2	inch	Flat	Boxwood	Offset	Scale,	10 × 50 to	the	e inch,	\$0.40
2331.	2	**	**		66	66	20 X 40			.40
2332.				66		**	30×60	64	11	.40
2333.			**	- 44	46	6.6	80×100	ir	66	,65

Foot Divided Decimally.

2340.	12-	inch	Flat	Boxwood	Scale,	100×500 to the foot .					. \$0.80		
2341.	12		11	4.6		200 X 400		**	·		.80		
2342.	12		46	**	12	300 × 600	11	66	i.		,80		
2343.	12		**	**	116	800 × 1000	**				1.20		

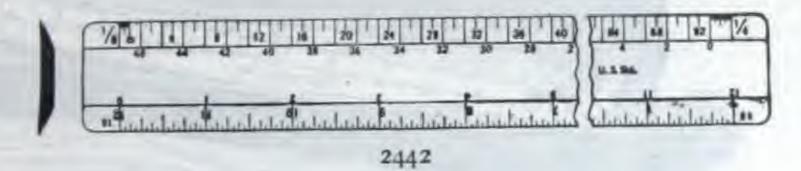
FLAT BOXWOOD SCALES.

Engine Divided, U. S. Standard.



FLAT BOXWOOD SCALES.

Engine Divided, U. S. Standard.



Miscellaneous Graduations.

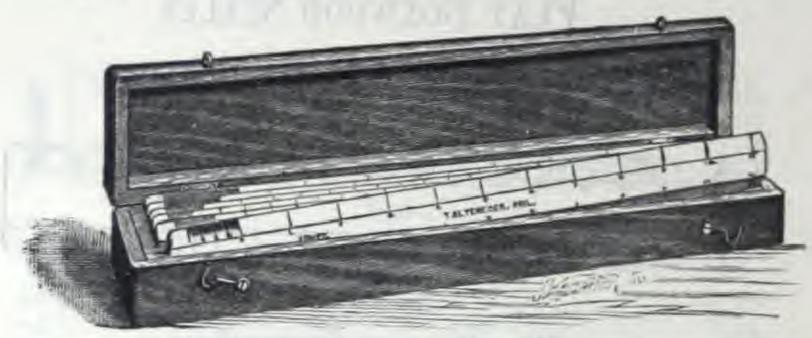
2440.	12-inch,	graduated	1/8, 1/4, 3/8 and 3/4		\$0.75
2441.	12 "	-66	1/8, 1/4, 3/4 and 1 1/2		-75
	12 "	**	1/8, 1/4 and inches Full Size .	4	-75
	12 "	44	11/2, 3 and inches Full Size .		-75
	12 "	44	Full Size and Half Size		1.00
	12 "	64	16ths and 32nds Full Size	i,	1.00
	12 "	44	16ths and millimeters	i	1,00
	12 "	66	10ths and millimeters		1.00

Flat Boxwoc1 Metric Scales.

2450.	10	cm.,	graduated	millimete	r and half	millimet	er.	4	\$0.50
2451.			11	- 66	15	- 6.6	4		.60
2452.			168	44	**	-44	41	ž.	-75
2453.			**	44	44	11			1.50

Nos. 2440 to 2453 are furnished in White Edge Scales at an additional cost of 50 cents, and when desired should be specified thus: "No. 2442, White Edge, \$1.25."

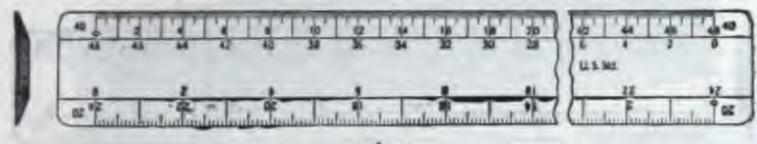
FLAT BOXWOOD SCALES IN CASES.



2470.	Nos. 2470 and 2471 are arranged like Fig. E, page 84. 4 Boxwood Scales, 12-inch. Graduated 1/8 and 1/4, 3/8 and 1/4, 1/2 and 1, 1 1/2 and 3 inches to the foot	
2471.	6 Boxwood Scales, 12-inch. Graduated 1/8 and 1/4, 3/8 and 3/4, 1/2 and 1, 11/2 and 3, 2 and 4, 6 and 12 inches to the foot.	
	Nos. 2475 and 2496 are graduated like Fig. F. page 84.	
2475.	8 Boxwood Scales, 12-inch. Graduated 1/8, 1/4, 3/8, 1/2, 1/4, 1, 11/2 and 3 inches to the foot.	
2476.	12 Boxwood Scales, 12-inch. Graduated 1/8, 14, 3/8, 1/2, 1/4, 1, 11/2, 2, 3, 4, 6 and 12 inches to the foot	7-50
		11.00
	Nos. 2480 and 2481 have a different scale on each edge, figured to read both ways.	
2480,	4 Boxwood Scales, 12-inch. Graduated 10 and 50, 20 and 40, 30 and 60, 80 and 100 parts to the inch	
2481.	20 and 40, 30 and 60, 80 and 100 parts to the inch-	
	4 2-inch offset scales to match	7.25
	Nos. 2485 to 2488 have the same scale on both edges, each edge is figured to read both ways.	
2485.	6 Boxwood Scales, 12-inch. Graduated 10, 20, 20	
2486.	40, 5c and 60 parts to the inch 12 Boxwood Scales. 6 12-inch, graduated 10, 20,	6.00
	30, 40, 50 and 60 parts to the inch:	
2487.	8 Boxwood Scales, 12-inch. Graduated 10, 20, 30,	9.25
	40, 50, 60, 80 and 100 parts to the inch	8.50
2488.	16 Boxwood Scales. 8 12-inch, graduated 10, 20, 30, 40, 50, 60, 80 and 100 parts to the inch;	5.50
	8 2-inch Offset Scales to match	13.25

FLAT WHITE EDGE SCALES.

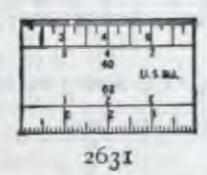
Engine Divided, U. S. Standard.



-	-	-	•
- 73	n	~	
- 145	.,	æ	•

2610.	6	-inch	Flat	White	Edge	Scale,	10×5	o to	the	inch	\$0.75
2611.	6	44	**	66	44	16	20 × 4	0		11	-75
2612.	6	44	**	**	46		30×6	0		16	-75
2613.	6	66	**	66	**	16	80 × 1	00	16	14	1.00
2620.	12	inch	Flat	White	Edge	Scale,	10×5	o to	the	inch	\$1.25
2621.	12	12	10	**	41	14	20 × 4	0	2.0	15	1.25
2622.	12	14	**	44	44	14	30×6	0	i.k	1.6	1.25
2623.	12	. 66	**	**	44	16	Sox I	00	14	66	1.75

Offset Scales.



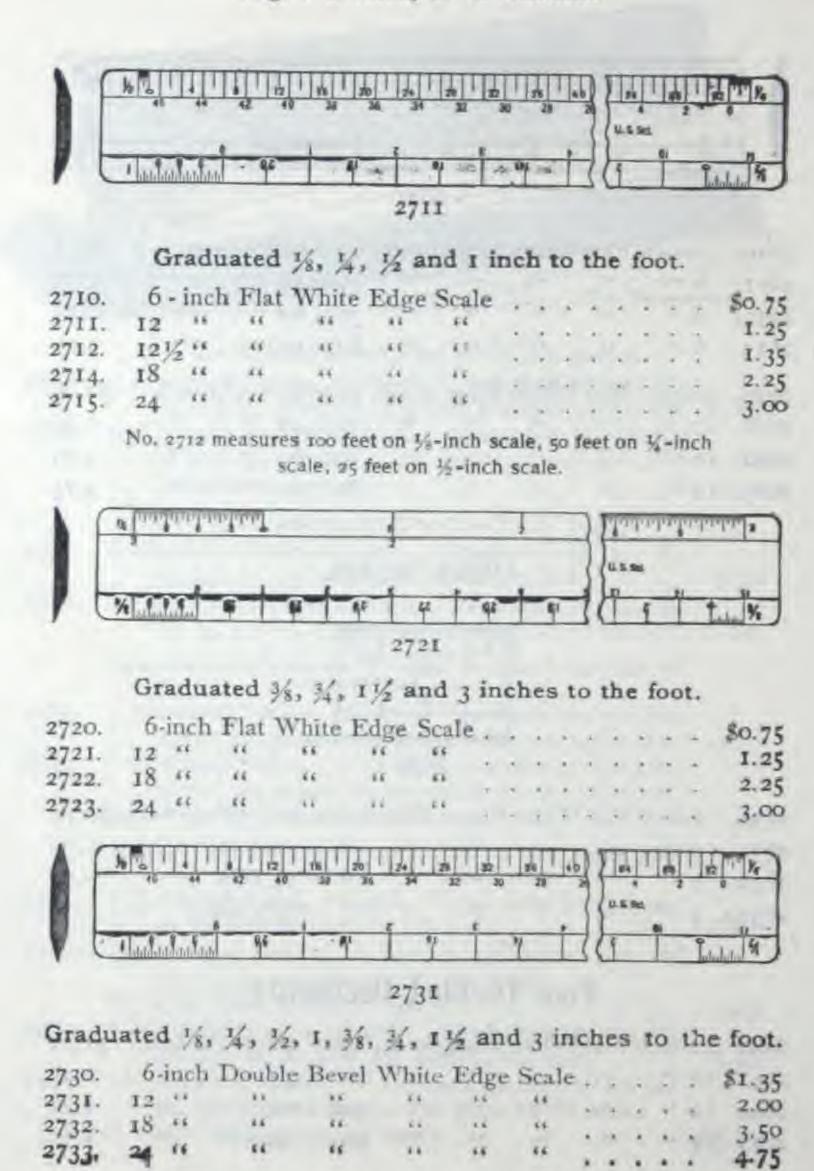
2630.	2-incl	h Flat	White	Edge	Offset	Scale,	10×50 t	o th	e in.	\$0.70
2631.	2 16	61	44	**	16	4.6	20 X 40	12	26	.70
2632.	2 "		**		**	66	30 × 60	**		.70
2633.	2 "	11	44	44	12	14	80 × 100	**		.90

Foot Divided Decimally.

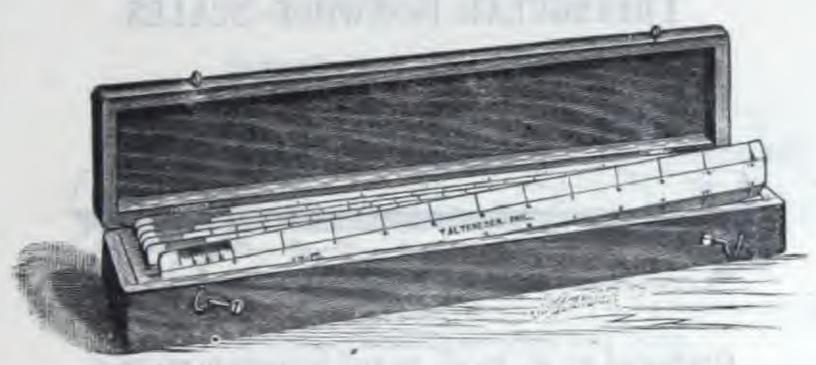
2640.	12	inch	Flat	White	Edge	Scale,	100 × 500 t	o the	foot,	\$1.25
2641.	12	74			11	16	200 × 400	12	36	1.25
2642.	12	**		44	11	16	300 × 600	16	(6	1.25
2643.	12	46	**	44		44	800 × 1000		2.5	1.75

FLAT WHITE EDGE SCALES.

Engine Divided, U. S. Standard



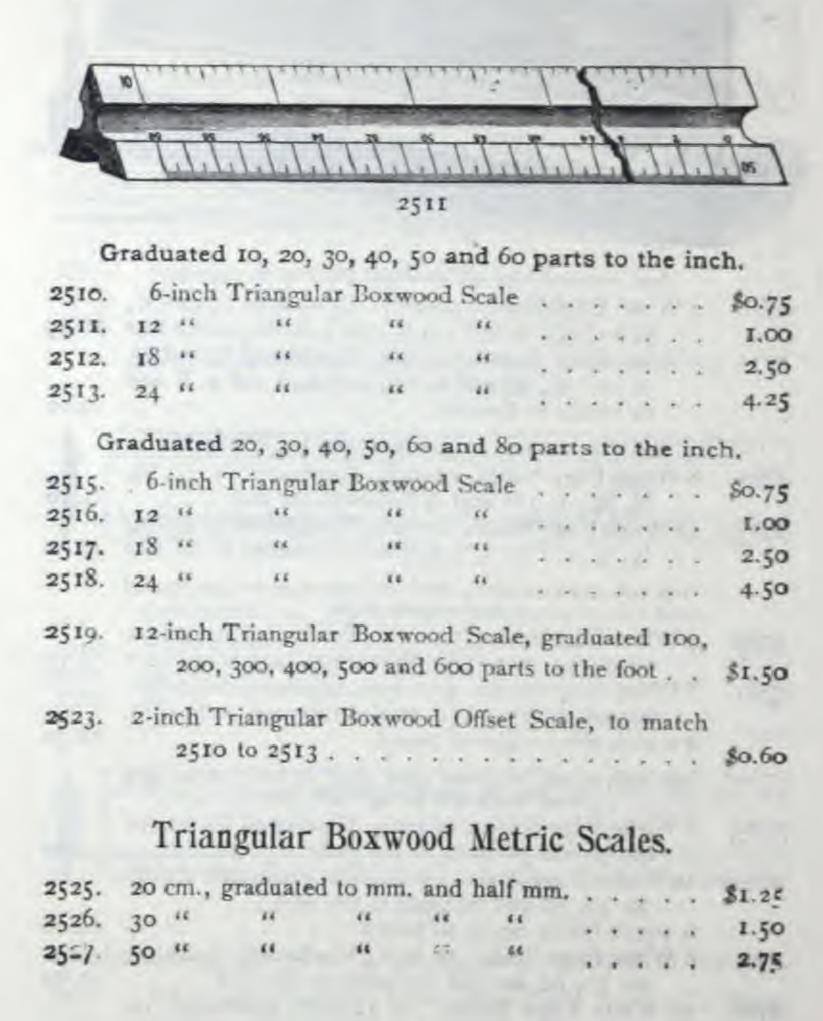
FLAT WHITE EDGE SCALES IN CASES.



902		
2770. 2771.	Nos. 2770 and 2771 are arranged like Fig. E, page 84. 4 White Edge Scales, 12-inch. Graduated 1/4 and 1/4, 3/8 and 3/4, 1/2 and 1, 1 1/2 and 3 inches to the foot 6 White Edge Scales, 12-inch. Graduated 1/8 and 1/4, 3/8 and 3/4, 1/2 and 1, 1 1/2 and 3, 2 and 4, 6 and	\$6.25 9.00
	Non-area and area or or or dupted like Fig. E. page 84	9.00
2775. 2776.	Nos. 2775 and 2776 are graduated like Fig. F, page 84. 8 White Edge Scales, 12-inch. Graduated 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1 1/2 and 3 inches to the foot 12 White Edge Scales, 12-inch. Graduated 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1 1/2, 2, 3, 4, 6 and 12 inches to the foot	11.50
	Nos. 2780 and 2781 have a different scale on each edge, figured to read both ways.	
2780.	4 White Edge Scales, 12-inch. Graduated 10 and 50, 20 and 40, 30 and 60, 80 and 100 parts to the inch	6.75
2781.	8 White Edge Scales. 4 12-inch, graduated 10 and 50, 20 and 40, 30 and 60, 80 and 100 parts to the inch; 4 2-inch offset scales to match	10.50
	Nos. 2785 to 2788 have the same scale on both edges, each edge is figured to read both ways.	
2785. 2786.	6 White Edge Scales, 12-inch. Graduated 10, 20, 30, 40, 50 and 60 parts to the inch	9.00
2/00.	30, 40, 50 and 60 parts to the inch;	
1111 -	6 2-inch Offset Scales to match	14.00
2787.	8 White Edge Scales, 12-inch. Graduated 10, 20, 30, 40, 50, 60, 80 and 100 parts to the inch	12.50
2788.	16 White Edge Scales. 8 12-inch, graduated 10, 20, 30, 40, 50, 60, 80 and 100 parts to the inch;	
	8 2-inch Offset Scales to match	19.50

TRIANGULAR BOXWOOD SCALES.

Engine Divided, U. S. Standard.



TRIANGULAR BOXWOOD SCALES.

Engine Divided, U. S. Standard.



Graduated 32, 36, 16, 14, 38, 34, 12, 1, 11/2, 3 inches to the foot, and one edge inches and 16ths.

2530.	6-	inch	Triangular	Boxwood	Scale	4				*	À	\$0.75
2531.	12		46	4.6	44	-	-	-				1.00
2532.	-		44	***	20			4	4			2.50
2533-		**	44	8.6	44		÷					4.25

Graduated 1/8, 1/4, 1/2, 1, 3/8, 3/4, 1 1/2, 3, 2 and 4 inches to the foot, and one edge inches and 16ths

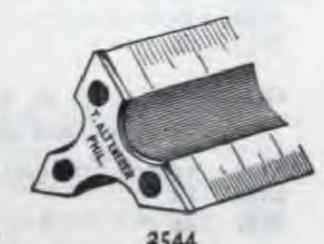
2535.	12-inch Triangular			Boxwood Scale								\$1.00
2536.			4.6	11	66	,		,.			+	2.50
2537.		777	**	66	44		+	÷	*	,		4.25

Metallic Triangular Scales.

2540.	12-inch Metallic Triangular Scale, graduated	like	
	No. 2511	like	\$2.50
2541.	12-inch Metallic Triangular Scale, graduated		
2542.	No. 2516	like	-
2542.	No. 2531		

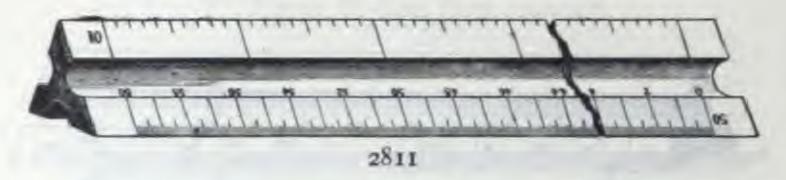
Alteneder's Triangular Scale Protectors.

on any Triangular
Scale at an additional cost of \$0.75



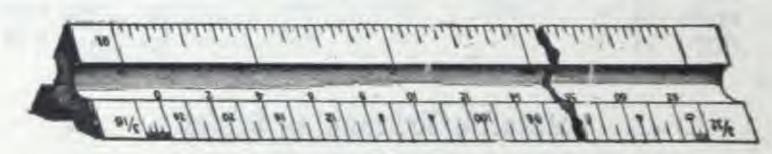
TRIANGULAR WHITE EDGE SCALES.

Engine Divided, U. S. Standard.



Graduated 10, 20, 30, 40, 50 and 60 parts to the inch.

2810.	6-inch	Triangular	White	Edge	Scale		+		\$1.50
2811.	12 "	46	16	66	86			-	2.50
2812.	18 11	4.6	3.5	55	44			2	4.50
2813.	24 11	1.1	1.0	"	86				6.50
2816.		Triangular 30, 40, 50,							2.50
2819.		Triangular, 200, 300,							2,50
2823.		Friangular V 2810 to 28							1.20



2831

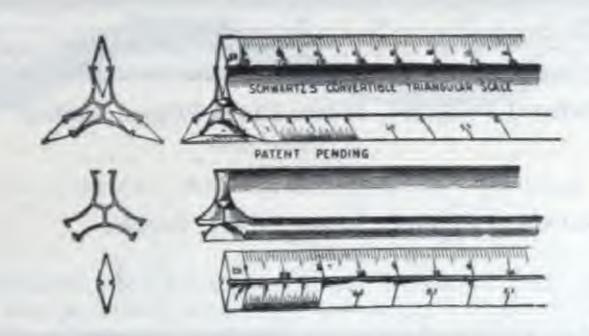
Graduated 32, 38, 18, 14, 38, 14, 15, 1, 11/2 and 3 inches to the foot, and one edge inches and 16ths.

2830.	6-	inch	Triangular	White	Edge	Scale		-	2	4		\$1.50
	12		16	46	56	55	3.				6	2.50
2832.	18	16.	44	66	8.5	88						4.50
2833.	24	36	16	**	-66	- 66			4	2	8	6.50

Graduated 1/8, 1/4, 3/8, 3/4, 1/2, 1, 1 1/2, 2, 3 and 4 inches to the foot, and one edge inches and 16ths.

2835.	12-	inch	Triangular	White	Edge	Scale			,			\$2.50
2836.	18	66	46	55	46	**			2.		ý.	4.50
2837.	24	16	**	**	**	**	,	×	1	1		6.50

SCHWARTZ'S CONVERTIBLE TRIANGULAR SCALE And Holders



			6 Inch	12 inch	18 Inch	24 Inch
Boxwood Scales, Holder of Bras	s,				100 100	-200
Nickel Plated		each,	\$1.55	\$1.80	\$4,45	\$7.10
White Edge Scales, Holder of						
Brass, Nickel Plated .		55	4.30	5.80	10.95	14.10
Brass Holder, Nickel Plated		11	1.00	2.00	3.00	4.00
German Silver Holder		14	1.00	2.00	3.00	4.00
Aluminum Holder			1.50	2.50	4.00	5.00
Scales with Six White Edges, Si	x Bo	x-				
wood Edges, Brass Holder		54	2.95	3.85	7.70	10.60

The Architect or Engineer having use for a more diversified number of divisions than ordinary triangular scales afford, will find relief in Schwartz's Convertible Triangular Scale, which can be had:

- 1. With a combined set of Architect and Engineer divisions
- 2. All Architect or all Engineer divisions
- 3. Plain boxwood edges
- 4. White edges
- 5. Six boxwood and six white edges; so that a boxwood scale is readily convertible into a white edge scale
- 6. In all sizes

Its construction makes the Architect Scale convertible into an Engineer Scale, and vice versa; gives an excellent angle of vision, perfect contact with the drawing, protects the divided surfaces from wear by friction, avoids the necessity of raising edge from drawing, which causes unsteadiness due to lack of contact, and frequent errors

A. W. FABER'S TRIANGULAR SCALES

Divided Into Inches or Inches and Centimeters

O meses	LAKARAGE	Later Laborate	RESERVED PRATE	the lates	Ellahabaha	Titles har har
A.W. FABER	-		- 0			
0/2 + # sr	41 21 51	4 D B	# 01 1		7 9 8	T WELLEN OF

700.	12	inch,	Natural Polished,	White	Plain Edges,	Inches		each,	
	15	11	116	41	61	44.		14	.4
	18	11	11.	31	2.6	11.0		44	. 5
710.	8:	inch,	Natural Polished,	Brass	Edges, Inche	s ,		each,	
	15	44	4.6	11	- 11		*		.6
	18	**	**		(4		-	110	7

		10	.0
A T PAS	-	(G	

12	44	Natural Polished	11	· ·	-	eac
15	3.0	44	41	16	-	24
18	9.6	16	111	1.6		44

760.	8 in.,	Natural Polished,	Plain Edges,	Inches an	d Meters	each,	.35
	15 "	91.	164	44	76		.50
	18 "	17.00	W	19	11	10	.60

IMPROVED NICKEL PLATED STEEL SCALE



6 inch, Improved Scale for Draughtsmen . each, \$1.00 12 inch, \$1.25 6 inch, Special Scales made to order . each, 2.00 12 inch, 2.50

Twenty-one different graduations for Architects' Scales Twenty-nine different graduations for Engineers' Scales

Each Scale has one kind of graduation on both sides; or a different one on each side, saving the constant care and loss of time required to avoid using the wrong graduation, where there are many on the same scale. A very convenient form. Weighs only 2½ ounces

ADJUSTABLE CURVE RULERS

Double Edge

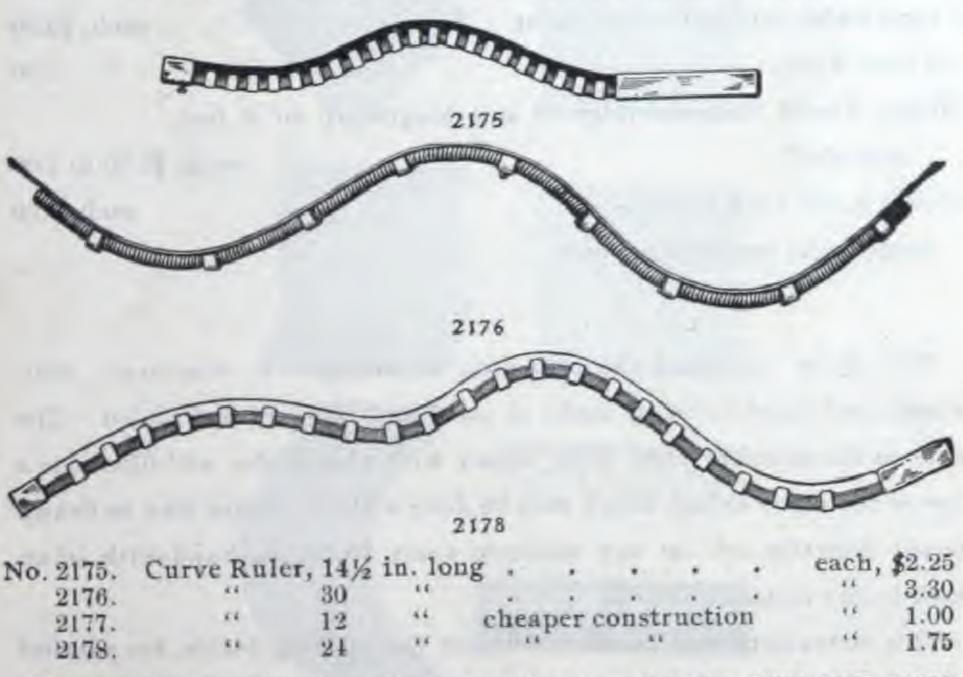


NO. 8830

lo. 8830.	Double Edge	Adjustable	Curve Rule	rs, 7 i	n. long	each, 45
8831.		**	14	15	11	., .90
8832.		**	11	31	4.6	" 1.70

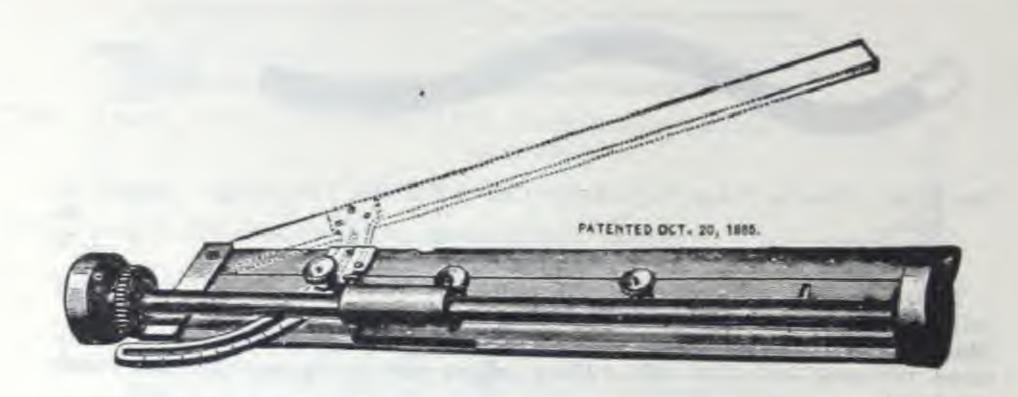
These rulers are intended for drawing all forms of curved lines, and will retain the shape into which they are bent. They consist of thick, black rubber with a removable lead core, protected on both sides by steel ribbons. Of the two ruling edges one is square and the other rounded

PATENT ADJUSTABLE CURVE RULERS



These rulers consist of a ruling edge of rubber (in Nos. 2175, 2177, 2178) or steel (in No. 2176) in combination with a bar of soft lead. They will hold any curve into which they are bent

THE "UNIVERSAL" RULER AND SECTION LINER



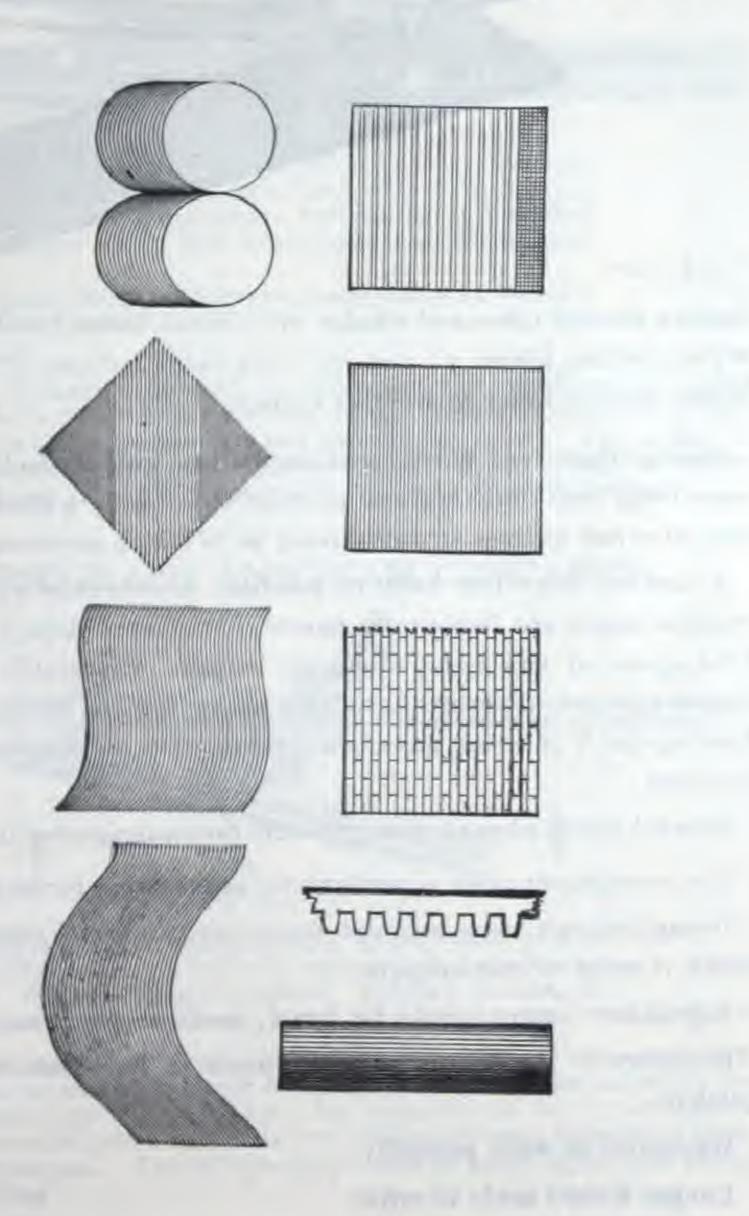
6 inch Ruler, v	without ce	entre	poir	it		-				each,	\$4.50
81/2 inch Ruler				1						10	5.00
Nickel Plated	Straight	Ed	ge of	any	ler	igth	up	to 3	feet,		
furnished	4								each,	\$1.00 t	0 4.00
Velvet Lined C	ase suppl	ied	14							each	, 1.00
Larger sizes	supplied t	o or	der								

This Ruler combines the following advantages: it is accurate, neat, simple and durable, being made of steel and brass nickel plated. The cuts on the opposite page were drawn with this Ruler and illustrate a few of the many things which may be done with it. Lines may be drawn in any direction and at any distance apart, from one-hundredth of an inch to any distance desired

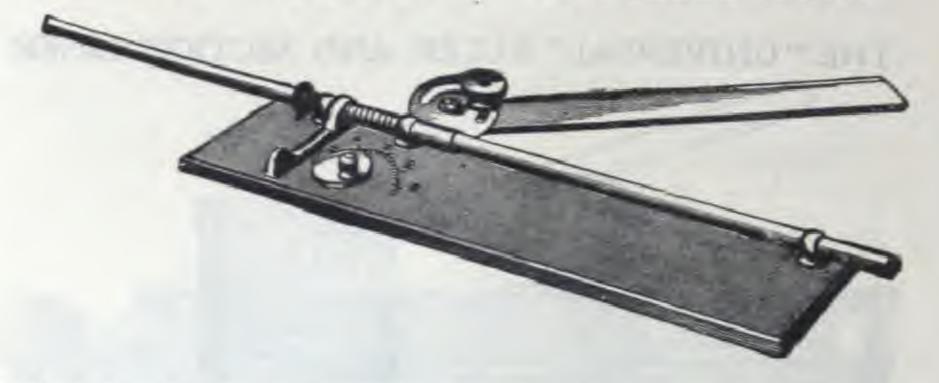
This instrument may be used without the spacing device, for parallel ruling, shading cylinders, etc., by simply turning the screw near the ratchet towards the right

SAMPLES OF WORK DONE BY

THE "UNIVERSAL" RULER AND SECTION LINER



WEBER SECTION LINER WITH HILL'S CLAMP



Sphiux Section	Liner	and	Shad	er,	with	Wood	Ri	aler,7	in.	long	each,	\$1.50
Weber Section	Liner										46	2.00
Weber Section											44.	4.00

Special Features: Work done accurately, quickly and easily; adjustment from lines touching one another to as wide a spacing as desired; easy to adjust to lines already drawn so to match previous section lining

A section liner not held in position inconveniently, loosely or by weights which are liable to be moved, but clasped firmly to the blade of a tee square at any point along its length. Especially convenient for double line and alternate light and heavy section lining, as well as for drawing the V of screw threads approximately and the spacing lines for lettering

Beveled under edge of ruler prevents catching against thumb tacks

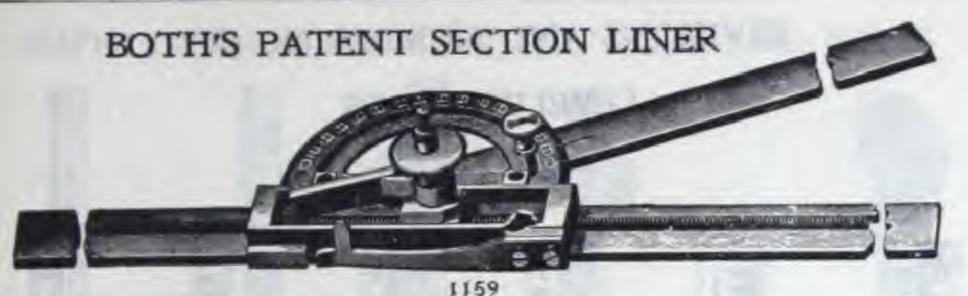
The transparent ruler is particularly appreciated for section lining

Draughtsmen's eyes relieved from the tiresome free-hand spacing which is more or less irregular

A good instrument speaks for itself; needs no argument

Economy for Architects and Engineers to have section lining done quickly

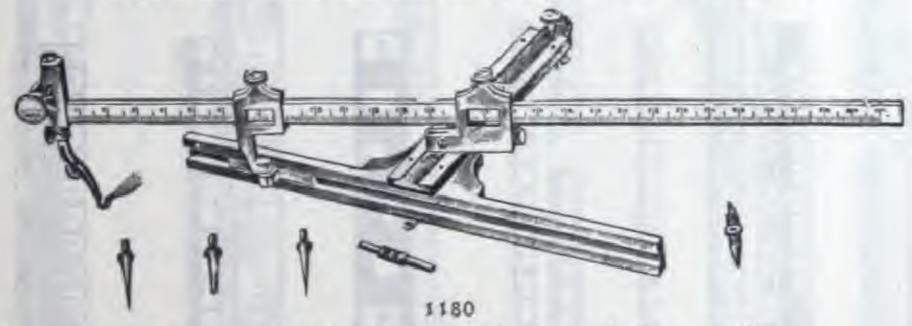
Warranted to work perfectly Longer Rulers made to order



Silver, base 1414 inches, rack 9 inches, arm projecting 10 inches beyond Protractor. Instrument in Polished Wooden Box, with full Directions for setting and using

From 4 to 200 parallel lines per inch can be drawn. When set to proper angle, decimal scales up to 1000 per foot, duodecimal scales up to 100 per inch or inch scales from 1/8 to 3 inches to the foot, in fact any desired scale can be accurately and rapidly produced. The easiest to manipulate, the most rapid and exact in execution, the simplest in construction, the finest in workmanship and the most durable known

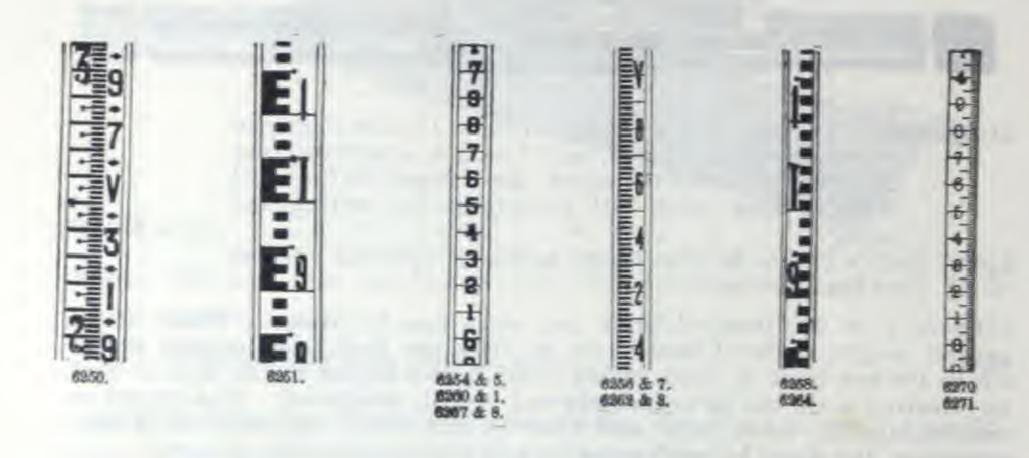
ELLIPSOGRAPH AND BEAM COMPASSES

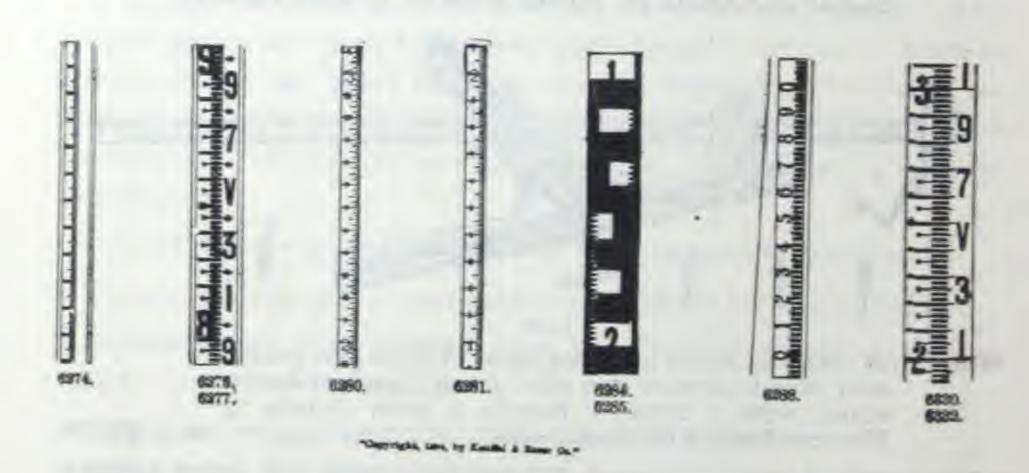


1180. Fine German Silver Ellipsograph, 12-inch Bar, graduated 32ds inches on one side and millimeters on the other, with 2 Pens, 1 Pencil, 3 Steel Points, in Morocco Case, with Directions each, \$25.00

The best and most improved Ellipsograph made. It draws ellipses of any shape of a major diameter from ½ inch up to 22 inches with the greatest accuracy and the graduated bar runners can be removed and a needlepoint inserted into a socket in one of the runners, forming a light, strong Beam Compass. The Ellipsograph can be taken apart and stored compactly in Case

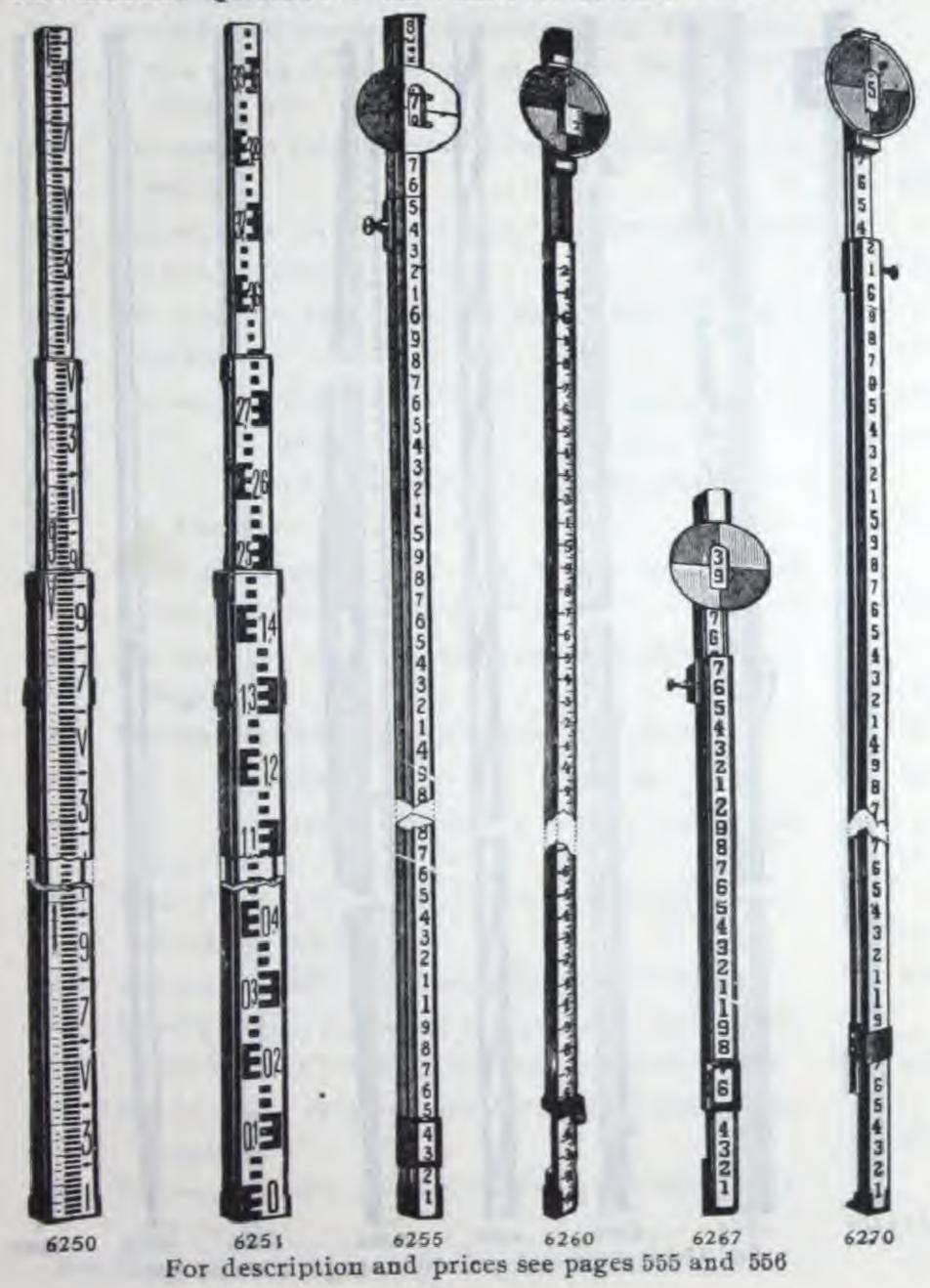
DIVISIONS AND NUMBERING OF LEVELING RODS

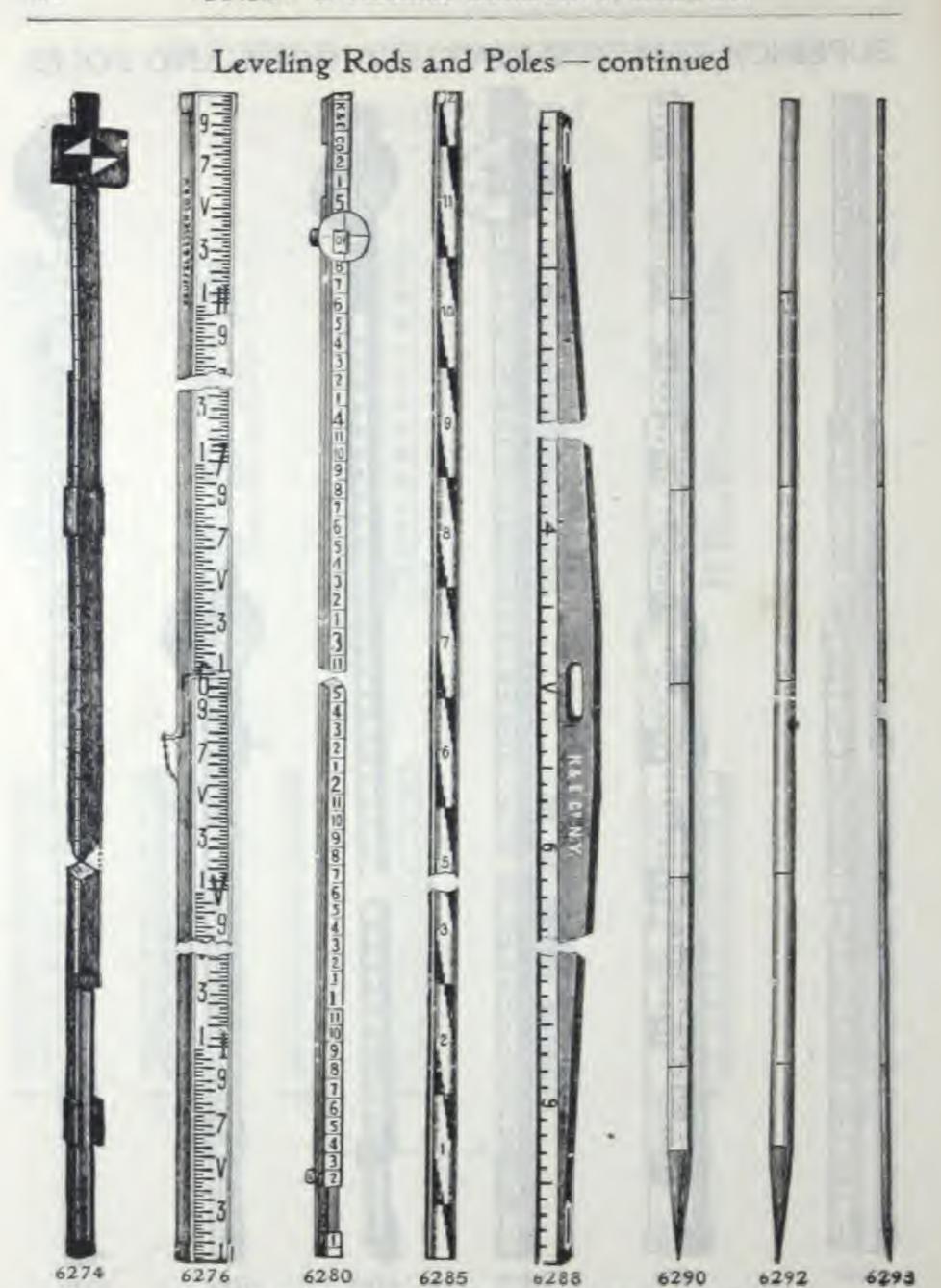




For description and prices see pages 555 and 556

SUPERIOR QUALITY LEVELING RODS AND POLES





For description and prices see pages 555 and 556

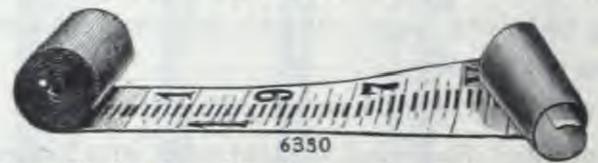
LEVELING RODS

6250.	English Self-Reading Rod, Telescoping, Mahogany,		
	with strong Brass Mountings, 5 feet long, sliding		
	out to 14 feet	each,	\$22.50
6261.	The same as 6250, Metric, 1.5 meter, sliding out to 4		
	meters	44	22.50
6254.	Philadelphia Rod, with Target, Vernier and Clamp,		
	7 feet, sliding out to 12 feet	1.6	15.00
6255.	The same as 6254, but with Patent Rolling Angle		
	Target ,	14	16.00
6256.	The same as 6254, but divided in $\frac{1}{10}$ and $\frac{1}{100}$ foot	16	15.00
6257.	" " 6255, " " " and Too "	-13	16.00
6258.	" 6254, but Metric, 2.2 meters, sliding out		
	to 4 meters	16	15.00
6260.	Light Philadelphia Rod, with Target, Vernier and		
	Clamp, 61/2 feet, sliding out to 12 feet		13.00
6261.	The same as 6260, but with Patent Rolling Angle		
	Target	32	14.00
6262.	The same as 6260, but divided in $\frac{1}{10}$ and $\frac{1}{100}$ feet		13.00
6263.	" " 6261, " " 10 and 100 "	1.6	14.00
6261.	" 6260, but Metric, 2 meters, sliding out		
	to 3.7 meters	11	13.00
6267.	Mining Rod, with Target, Vernier and Clamp, 3 feet,		
	sliding out to 5 feet	44	12.00
6268.	The same as 6267, but 5 feet, sliding out to 9 feet .		12.75
6270.	New York Rod, Hardwood of Light color, with Target,		
	Vernier and Clamp, 61/2 feet, sliding out to 12 feet .	. 21	14.00
6271.	The same as 6270, but with Patent Rolling Angle		
	Target	4.6	15.00
0272.	The same as 6270, but Metric, 2 meters, sliding out to		1 2 2 2
	3.7 meters		14.00
For	illustrations see pages 552, 553 and 554		

Leveling Rods - continued

6274.	wood, with Target, Veriner at each end, 61/2 ft.	1.03	#1 × 00
6276.	sliding out to 11 ft		\$14.00
02101	Bronze Hinge, 12 feet, folding to 6 feet	16	12.00
6277.	The same as 6276 14 feet folding to 7 feet	1.6	13.50
6280.	Architects' Rod, Light Colored Hardwood, Brass Mounted, with Target, Vernier and Clamp, Divided		
4010	to inches and 1/8, 51/2 feet sliding out to 10 feet .		6.00
6281.	The same as 6280, Divided in $\frac{1}{10}$ and $\frac{1}{100}$ feet	15	6.00
6284.	Florida Rod, (in one piece) 10 feet, Hardwood .	14	8.00
6285.		-6.0	10.00
6288.	Cross Section Rod, 10 feet, Divided on both sides, in 10 and 100 ft., Pinewood, 2 Level Bubbles, opening for		
	For illustrations see pages 552, 553 and 554	**	10.00
	RANGING POLES		
6290.	Painted red and white alternately every foot,		20.5
3292.	Ranging Poles of best Seasoned Wood, Round, Tapered, Painted red and white alternately every foot,	10 ft	\$3.50
	6 feet each, \$2.00 8 ft. \$2.25	10 ft	\$2.50
6293.	Ranging Poles of best Seasoned Wood, Octagon, Tap- ered, Painted red and white alternately every foot,		
222	6 feet each, \$2.00 8 ft, \$2.25	10 ft	\$2.50
6294.	Ranging Poles, Metric, of best Seasoned Wood, Octa- gon, Tapered, Painted red and white alternately		2004
	every half meter, 2 met. each, \$2.50 21/2 met. \$3.00	3 met.	\$3.75

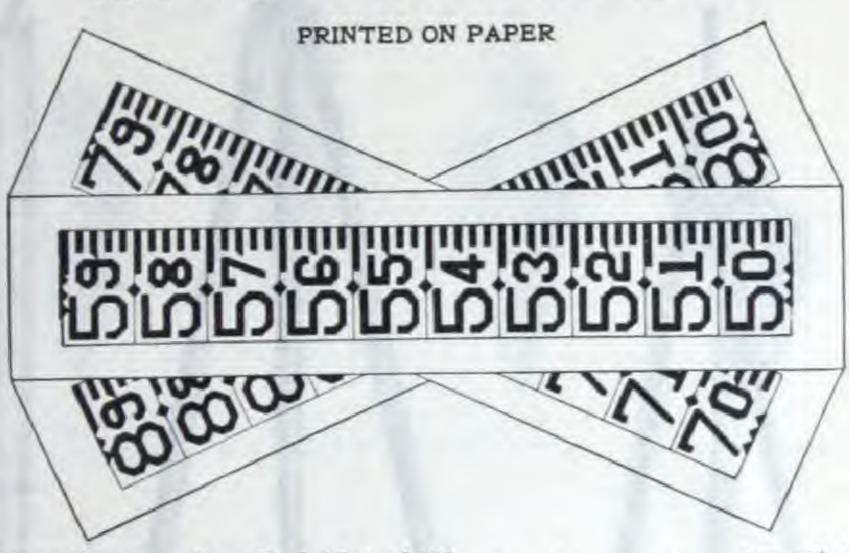
FLEXIBLE OR POCKET LEVELING RODS



6330.	Flexible or Pocket	Leveling R	od, 8 ft.,	Div.in	and the f	t. each.	\$3.00
6331.	11	4.6	10	14	11 100	**	3.25
6332.	11.	41	12	160	54	30	4.00
6335.	X.C	- 9.	12 ft.	Div.in.	and% in.	4.6	4.00
6340.	**	90	metri		and the second second		
	Div. to centimete	r	11.4	4		37	4.00

These Rods are strips of prepared canvas, 3 in. wide, divided like selfreading rods. For use they are fastened to a straight board with thumb tacks. When rolled up they are easily carried in the pocket

FROST & ADAMS CO'S NEW SELF READING LEVELING ROD



Self Reading Leveling Rod (Set of 12) .

per set, \$1.25

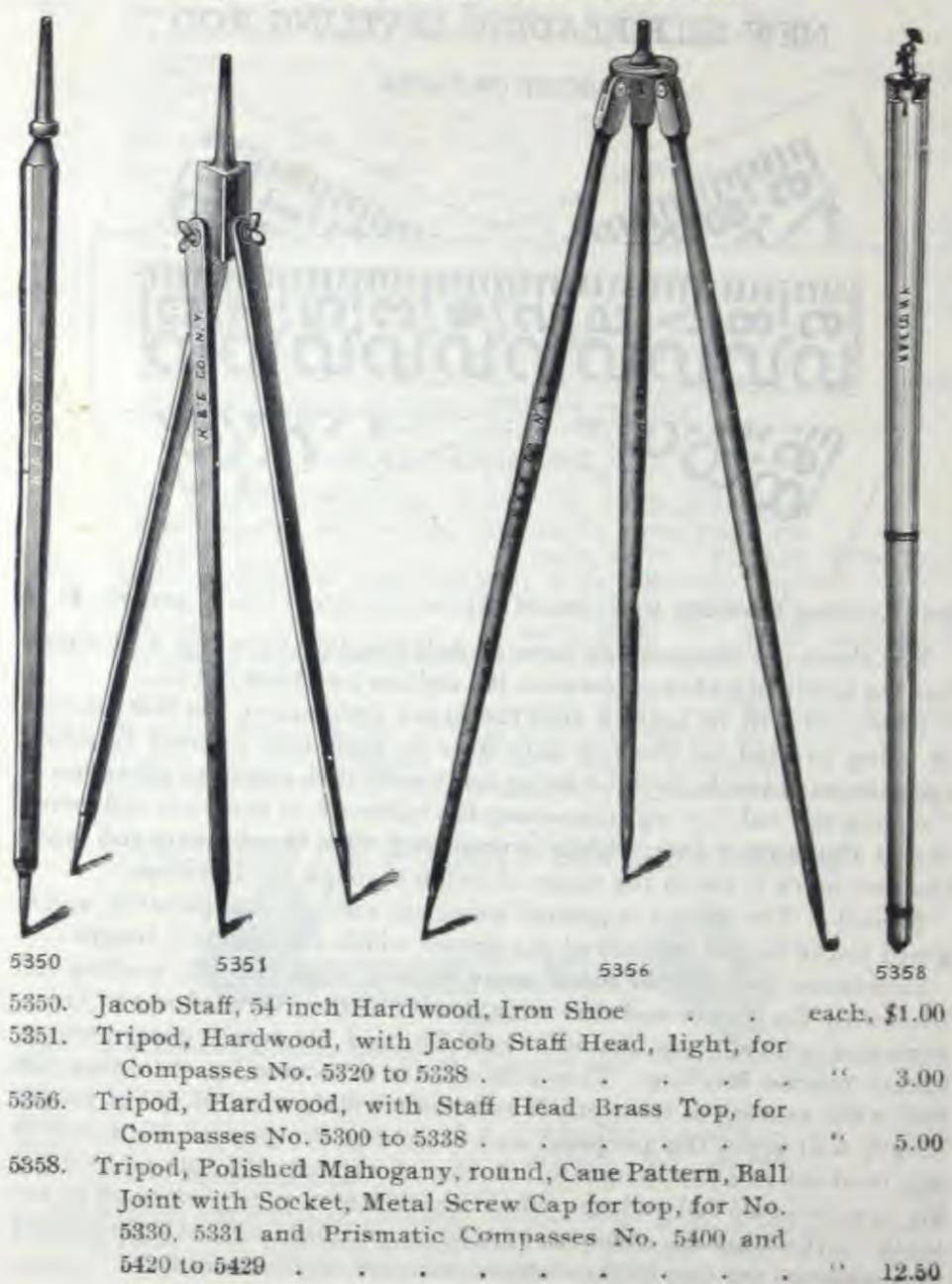
The above cut shows a new form of Self Reading Leveling Rod which has the following advantages over the ordinary style of rod:

First: It will be noticed that the figure designating the foot, instead of being printed on the rod only once in each foot interval is shown opposite each tenth, thereby doing away with that awkward operation of "raising the rod," or sighting along the telescope of the level and guessing at the correct foot, which is necessary with the ordinary rod when the foot-mark is not in the range of vision through the telescope

Second: The design is printed on paper, each foot separately, and is glued to the face of any rod of the proper width and required length

Levels can be taken so much more rapidly with the self reading rod than with the target rod that were it not for the awkwardness of transportation, probably the former would be used for nearly every purpose except precise leveling. This difficulty is overcome by obtaining the rod in the locality of the work (any two-inch strip of wood of the proper length will serve the purpose) and attaching the printed slips, which can be done in a few moments. A coat of varnish will make it as durable as a stenciled rod and the whole operation may be performed in one tenth of the time necessary to stencil an ordinary rod, at a very small proportion of the cost of the cheapest rod now on the market

JACOB STAFFS AND TRIPODS



2.50

.75

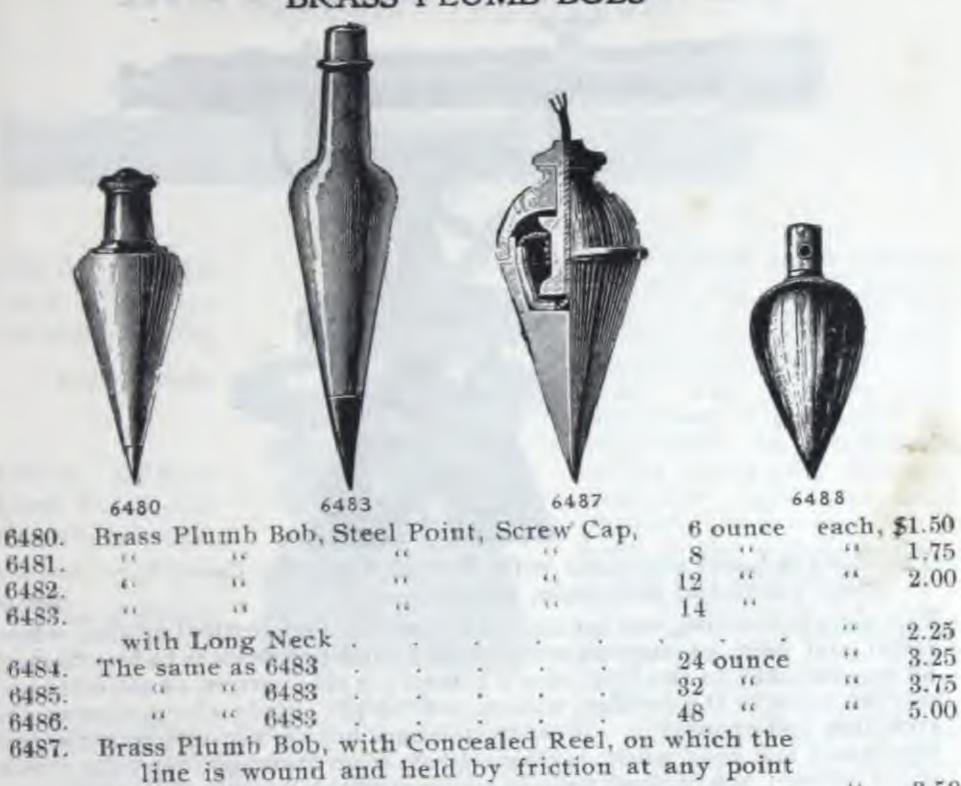
1.00

1.20

ounce

111/2

BRASS PLUMB BOBS



PLUMB BOB CORD

Common Brass Plumb Bob, Steel Point, 81/2

of its length

Iron Plumb Bob

6488.

6489.

6490.

6491.

6496.	Plumb Bo	b Cord.	Best Linen,	thin medium	or thic	k	per yard,	.03
6497.	40		Best Braide				**	06

STAKE TACKS



6494.	Stake Tacks,	Galvanized.	tin box of	50			per box, .10
6495.	ii I I I I I I I I I I I I I I I I I I		tin box of		4	2	.20

These Tacks have an indentation in the surface of the head to guide the point of the Plumb Bob in exactly indicating position

THE YANKEE - A COMPOUND LEVEL



The Yankee Level complete with Tripod, Carrying Case, Plumb Rod and Sunshade, guaranteed

\$40.00

For simple leveling and laying off horizontal and vertical angles, where speed and ease, or manipulation rather than precision is to be attained. As an auxiliary to the Engineer's transit for side parties, or estimate and similar work to the builder, mason, millwright, landscape gardener and architect indispensable. Ideal for preliminary surveying; farm surveying, street and road work, laying a ditch, pipe drainage, running sewer, water mains; the highest type of an inexpensive transit obtainable.

Workmanship and materials throughout are the best. Moderate cost was attained by eliminating complicated and costly features, and retain-

ing all elementary principles.

A ten-inch erecting telescope of 12 diameter power, with ground and graduated level attached, is held by a swivel, forming the horizontal axis, around which the vertical arc of 11/2" radius revolves. This arc is divided to single degrees and read by an index line placed on the standards. A rigid double standard carries the upper element, and between this and the vertical center a 31/2" diameter plate is held, upon which the vernier is engraved, giving a reading of five minutes on horizontal angles.

The horizontal circle is cast solid with leveling head, four leveling screws, shifting centre, large diameter foot plate, and a substantial, yet

graceful tripod head, form the lower elements.

The Yankee is a New England product designed and now manufactured by experienced instrument makers, and has passed all "experimental stages."

EXCELLENT FEATURES OF THE YANKEE

"The lightest instrument made with as many provisions; the simplest instrument for the same number of uses; the best made instrument for such moderate cost; the vernier on a circular plate saves the circle from springing eliptical in case the instrument falls; the only instrument where the plate levels are saved by quickly employing the telescope level."

"QUEEN" LAND LEVEL



EN & CO. INC. FH

1535 A

1534 A. Queen Land Level, for horizontalangles

each, \$20.00

1535 A. Queen Land Level, for horizontal and vertical angles

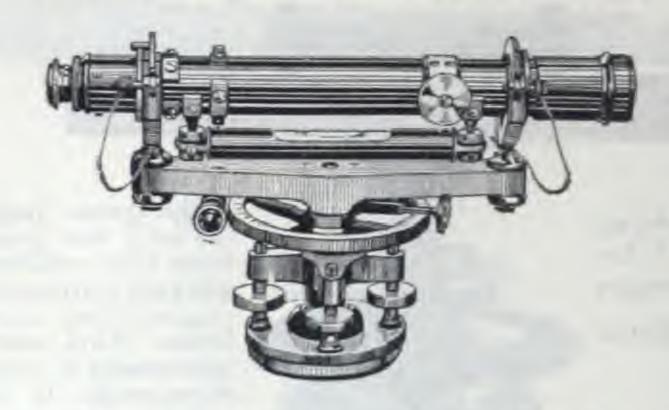
each, \$25.00

The Queen Land Level is the only low priced instrument that combines all the working features of the finer engineering transits and levels. This complete little instrument is practically indispensable to engineers, county surveyors, farmers, landscape gardeners and planters. It is a great labor saver to the wheelwright in lining and setting up shafting; to the builder and bricklayer a valuable substitute for the primitive level board formerly used in setting up foundations, floors, sills, and

running grades. It is also excellent for the scholar, illustrating the elementary principles of engineering and surveying. It can be used for angulation, level lines, grading streets, sewers and drains

The construction is extremely simple, having as few parts as possible, and combines compactness and efficiency so that anybody can at once work it successfully and without special explanations. The Telescope is 81/2 inches long, having achromatic objectives, with magnifying power 10 times. The Eye-piece has four lenses, showing objects in their natural pos.tion. The cross wires are fixed in the Telescope so that there is no danger of their losing the adjustment. The level is mounted on top of the Telescope and is provided with adjusting screws. The Telescope and Level are securely mounted on a swivel bearing, which permits of an elevation or inclination of the Telescope 25 degrees from the level line, and can be clamped in any position. The leveling frame is provided with four leveling screws whose lower ends are ball jointed. The centre is cast of one piece with the leveling plate, and its outer edge levelled and graduated into degrees. The socket is carefully fitted to the centre of the leveling frame, and is also provided with a clamp screw. The arc is cast on this socket and graduated into degrees. lower end of the leveling plate has a half ball which connects the tripod plate to the upper part, as in the case of regular transits and levels. The instrument is screwed to a substantial tripod and is packed in a wooden carrying case, making it exceedingly portable

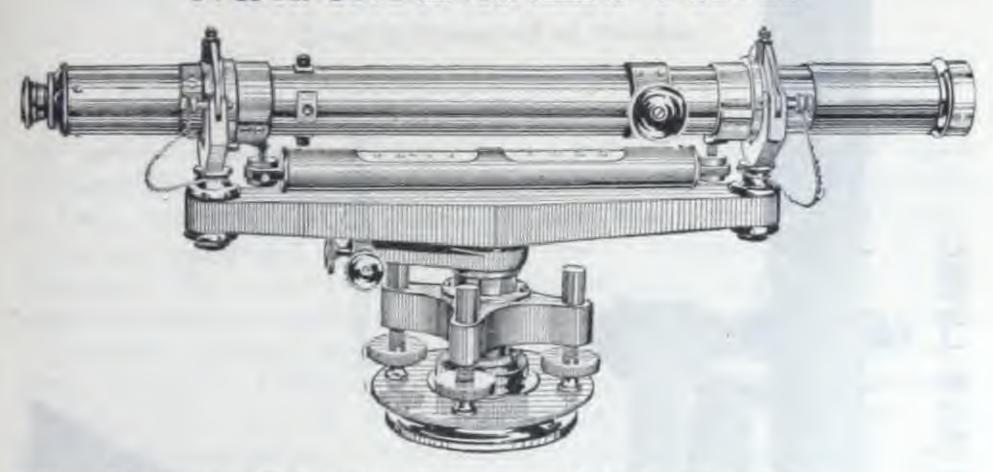
F. & A. CO.'S ARCHITECTS' LEVEL



651. Architects' Level with Improved Clamp and Tangent
Screw each, \$50.00

This instrument is especially designed for Architects and Contractors and may be used in Leveling Walls, Laying out Angles, Street and and Building Work, Setting Line Shafts, and in fact doing all work requiring precision leveling. The Lenses are of the best. These instruments are constructed throughout of the best Phosphor-Bronze and Bell Metal.

F. & A. CO.'S ENGINEERS' Y LEVEL



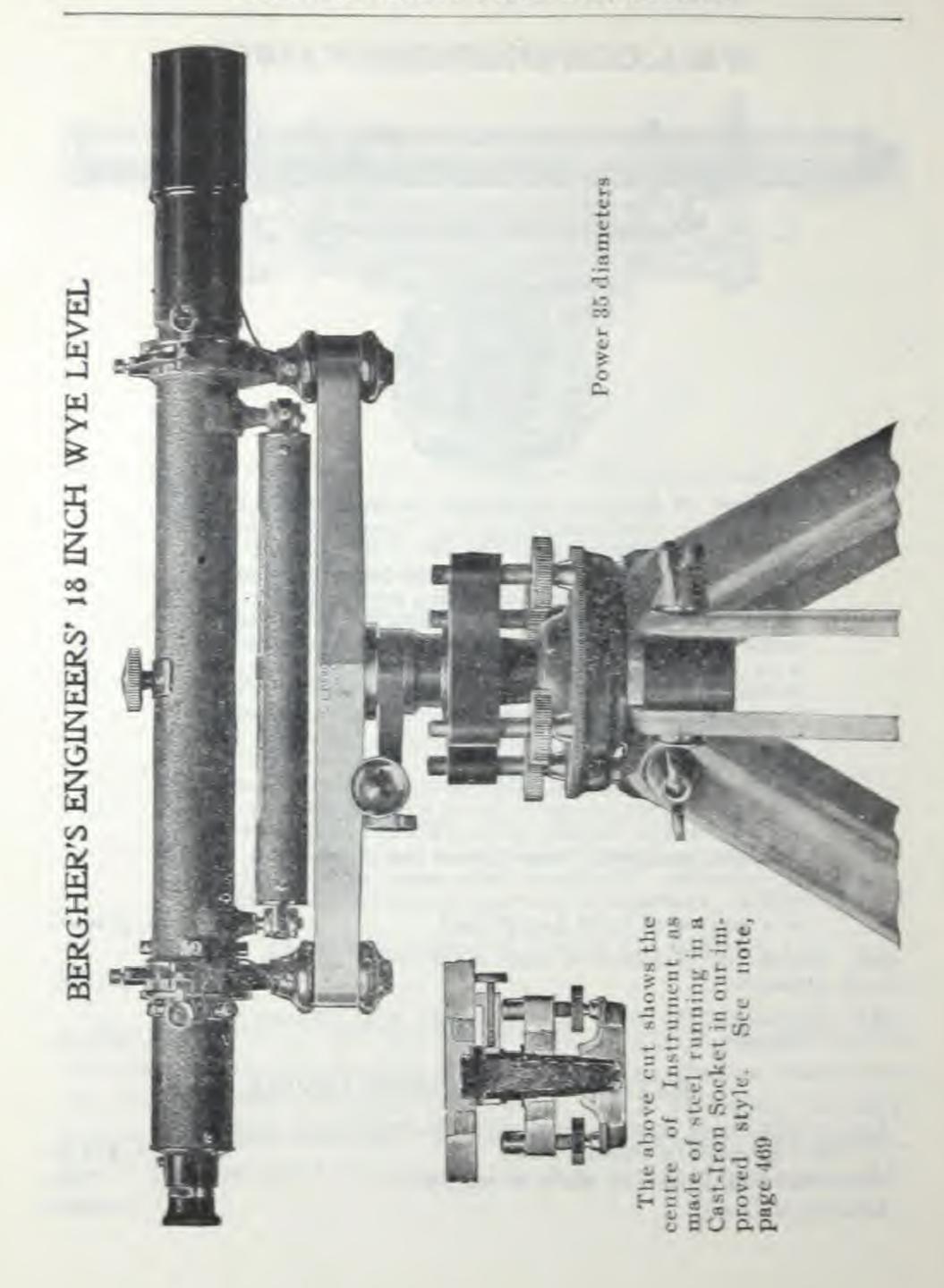
Engineers' Y Level. Telescope 18 inch, with Dust 652. Guard, Sun Shade and Dust Cap; Magnifying Power, 35 diameters; Objective, 11/8 inch, with Rack and Pinion Movements; Eyepiece adjustable for focusing cross-hairs; Graduated Level Vial, very sensitive, and adjustable vertically and horizontally. The Bar is made of Government Bronze and combines strength with lightness; it has a Long Rigid Center and the Rings of Telescope are of Bell Metal, which rest in the wyes and also support the level vial. One of the wyes is adjustable for altitude and is provided with adjustable stop for placing the telescope so the crosshairs are horizontal and vertical. Four German Silver Leveling Screws; Clamp and Tangent Screws are attached to the Bar, so they always keep the same relative position to telescope on the right hand side of operator. Weight of instrument without tripod, 12 lbs. Instrument complete in fine Polished Mahogany Box, with Split Leg Tripod . . each, \$110.00

653. Engineers' V Level is also made with 20-inch telescope each, \$115.00

654. Engineers' Y Level is also made with 16-inch telescope each, \$100.00

EXTRAS TO ENGINEERS' LEVELS

Any of the above instruments wit	h Har	dened	land	I Gi	round		
Steel Spindle in annealed iron							\$10.00
Extension Leg Tripod in place of re	egular					116	5.00
Reversion Level			4			10	10.00



BERGHER'S ENGINEERS' 18 INCH WYE LEVEL

Leveling Instrument of Precision

Wye Level, 18 inch with protection to the Object-slide each, \$140.00

Eighteen or seventeen inch powerful telescope; aperture of object-glass 13% inches in diameter; eye-piece provided with an improved screw arrangement for the accurate focussing of cross-wires; field of view large and flat; telescope provided with an adjustable stop to readily set cross-wires horizontal and perpendicular; line of collimation true on all distances; objects erect; telescope balanced each way from the centre when focussed to a mean distance with sun-shade attached to it to secure the highest accuracy attainable; telescope rings and the centre are very stout, long and of the hardest bell-metal; cross-bar is cast hollow and provided with ribs; 8 inch very sensitive spirit level; instrument does not detach from tripod above leveling screws; it packs whole and stands in the case erect. Mahogany Case, provided with straps and hooks, contains Sun-shade, Wrench, Screw Driver and an Adjusting Pin

Weight of Instrument 11 pounds, weight of Tripod from 7 to 7½ pounds, gross weight of Instrument, packed securely for shipment, in 2 boxes, about 48 pounds

Telescope and Level Tube will be cloth-finished, unless ordered to the contrary, when an extra charge of \$5.00 will be made. However, we strongly advise the cloth-finish

BERGHER'S NO. 2 ENGINEERS' 14 INCH WYE LEVEL

No. 2. The essential features of this instrument are like those enumerated above, and shown in cut of 18 inch Engineers' Wye Leve' with the exception of size and weight. It is designed to be used in cases where a lighter instrument is desirable. It is provided with a 14 inch telescope which has an aperture of 14 inches in diameter and a power of 27 diameter; 6 inch sensitive spirit level; steel centre; four leveling screws

Weight of instrument, 9 pounds; weight of tripod, from 6½ to 7½ pounds, gross weight of instrument, packed securely for shipment, in 2 boxes, about 40 pounds

EXTRAS TO BERGHER'S ENGINEERS' WYE LEVEL

Centre of Instrument made of Steel, and hardened, and run-		
ming in a socket of cast iron, improved style :	ach,	\$15.00
Stadia Wires, fixed	19	3.00
Short Focus Leus, one pair	-0.0	16.00
Metal Mirror with Universal Joint. This is readily attach- able to the instrument and facilitates the reading of the		
bubble on soft ground without stepping aside Extra Sun-shade with smaller aperture, for use with the tele-		10.00
scope when the sun's rays are too bright for accurate work.	24	1.50
Instrument provided with 3 Leveling Screws*	and,	18.00
Gossamer Water Proof Bag, for protection from rain or dust	~*	1,00
Bottle of fine Watch Oil, to lubricate the level centre	al.	.20

^{*} Four leveling screws commend themselves in the ordinary class of instruments for the greater rapidity with which an instrument can be leveled up approximately and that (no matter how much the leveling screw may be worn) when brought to a true bearing on the lower leveling plate, all such looseness is taken up

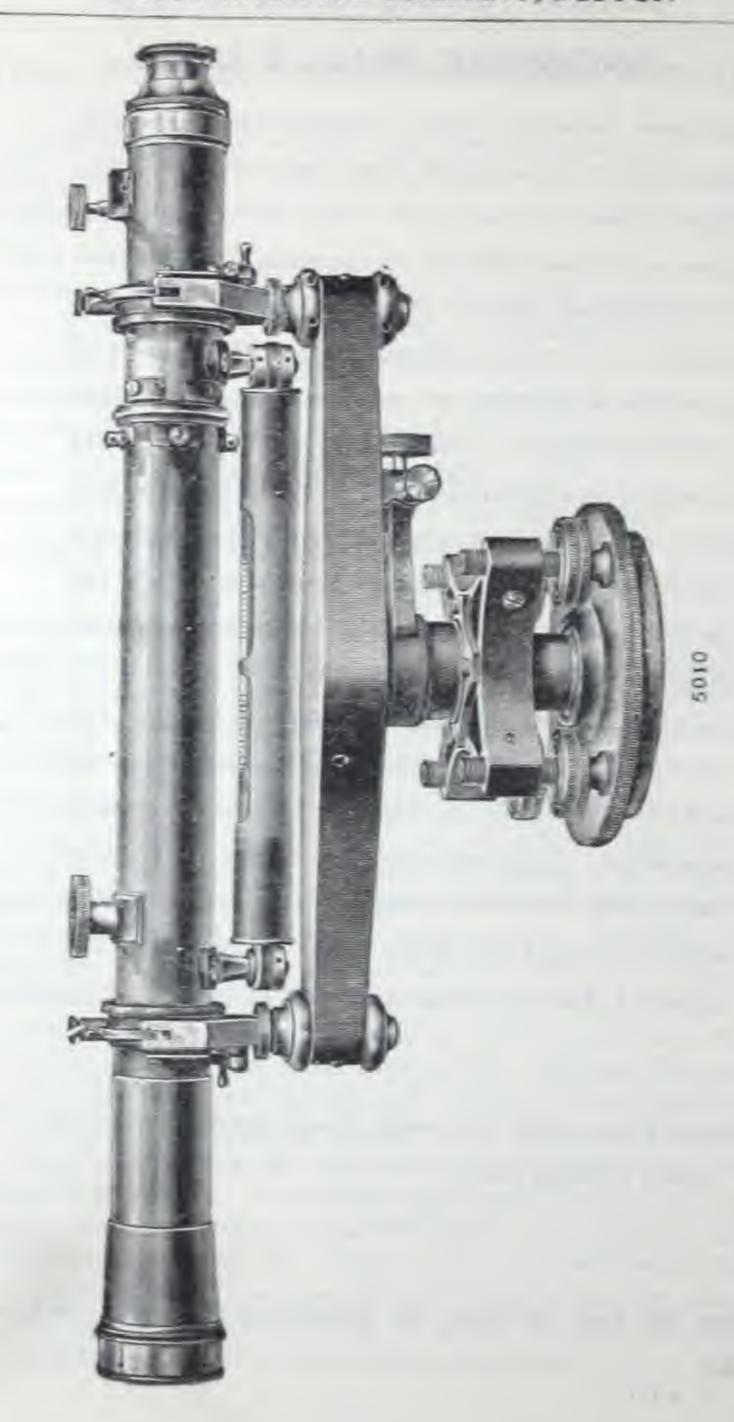
I Steel Centres. - Although the centres of our Wye Levels, which are long and unyielding, to afford steadiness, are giving high satisfaction, trasmuch as they are made of very hard bell metal (nearly equal to soft steel , in order to revolve with a minimum of friction, we also make them. when so ordered, of steel to run in a socket of hard cast from. In using these two latter metals whose co-efficient of expansion is nearly alike, the same condition as to a free motion in all temperatures obtains. whether below zero or 104 degrees above, as with our hard bell metal centre running in a socket of brass composition, with the difference, however, that the steel ones will retain their precise fitting qualities so well that the bubble of the telescope's spirit level will hardly show any displacement upon revolving the instrument when leveled up, even after years of constant service. In order to make our superior steel centre and cast iron socket construction a standing feature in our Wye Levels, we placed the cost at a nominally higher price only, although the cost of production to us is more than double that of the customary style of steel centre. We strongly advise to order it where first greater outlay is not considered as important as greater wearing qualities

ENGINEERS' SMALL Y LEVEL

Engineers' Small V Level, Achromatic Terrestrial 5005. Telescope 15 inches, with Dust Cap and Sun Shade, Object Glass 14 inch with Rack Movement, Eyepiece with Patent Micrometer focusing arrangement. Fine sensitive Bubble graduated on the glass, adjustable vertically or horizontally. The bar is of gunmetal and shaped to combine greatest strength with least weight. The Telescope rests in Y's, one of which is adjustable for altitude; they are provided with improved adjustable stops for so placing the Telescope that the Cross Hairs are vertical and horizontal. It is locked in the Y's by a patented arrangement dispensing with the Pin Bolts. The Leveling Screws are made of German Silver. The Clamp and Tangent Screws are attached to the bar and revolve with it, so that they are always equally accessible. Improved Tangent Screw of German Silver with Counter Spring. Instrument complete with adjusting Pins, Water Proof Cover, etc., in fine each, \$100.00 Polished Mahogany Box, and with Tripod

We have the best facilities for Repairing Surveying Instruments of any make

K. & E. ENGINEERS' Y LEVEL

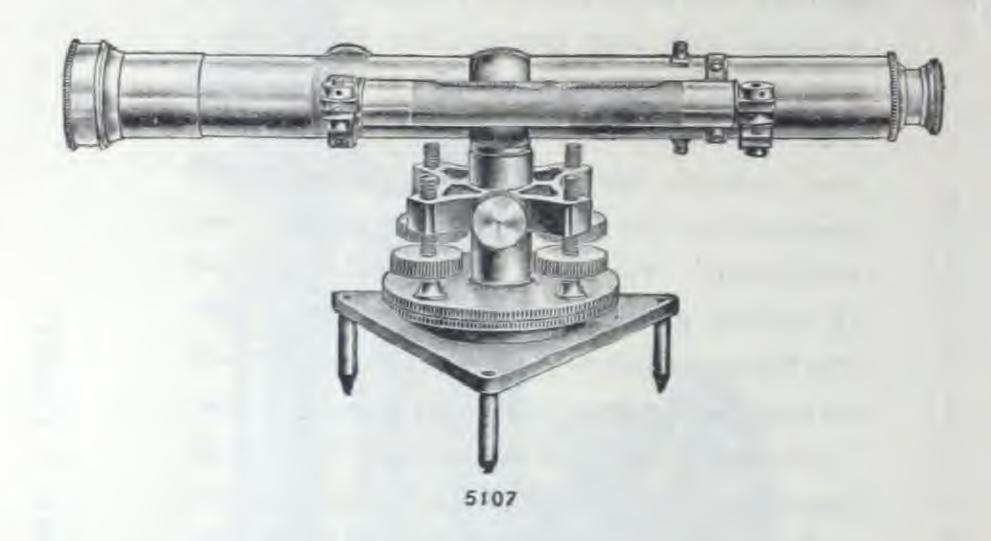


No. 5015 is the same instrument, but with three leveling screws

ENGINEERS' Y LEVEL

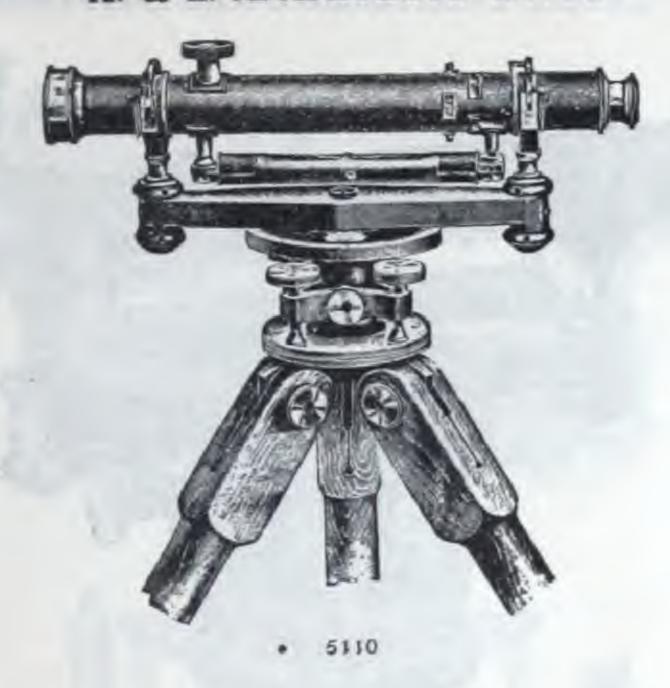
5010.	Engineers' Y Level, Achromatic Terrestrial Telescope,	
	18 inches, with Dust Cap and Sun Shade, Object	
	Glass 1% inch, with Improved Rack Movement, Eye-	
	piece with Patent Micrometer focusing arrangement.	
	Fine, sensitive Graduated Bubble, vial 634 inches,	
	graduated on the glass, adjustable vertically and	
	horizontally. The bar is of gunmetal and shaped	
	to combine greatest strength with least weight.	
	The Telescope rests in Y's of which one is adjustable	
	for altitude, and is provided with stops for so plac-	
	ing Telescope that the cross hairs are vertical and	
	horizontal. It is locked in the Y's by a patented	
	arrangement, dispensing with the pin bolts. The	
	Leveling Plate is replaced by four arms. The Clamp	
	and Tangent Screws are attached to the bar and re-	
	volve with it, so that they are always equally	
	accessible, Improved Tangent Screw of German	
	Silver, with Counter Spring. Instrument complete	
	with Adjusting Pins, etc., in fine Polished Mahogany	
	Box and with Tripod eac	h, \$130.00
5012.	Y Level, like 5010, but Telescope 20 in., level vial	
	6¼ in	135.00
5013.	Y Level, like, 5010, but Telescope 22 in., level vial	
	634 in	140.00
5015.	Y Level, like 5010, but Telescope 3 Leveling Screws	140.00

AMERICAN DUMPY LEVEL



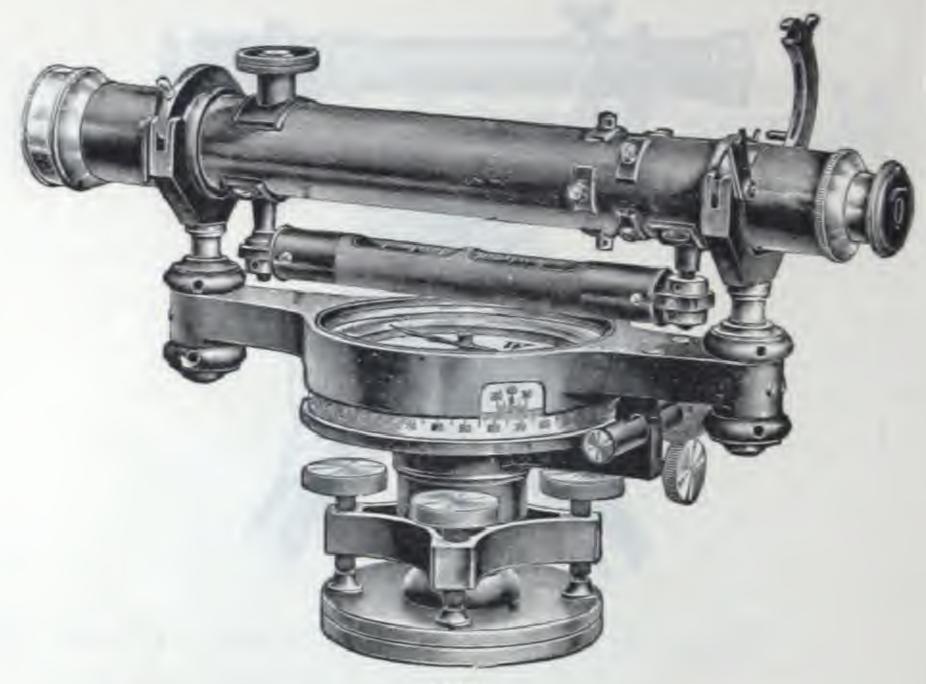
We have the best facilities for Repairing Surveying Instruments of any make promptly and satisfactorily

K. & E. ARCHITECTS' LEVEL



5110. Architects' or Builders' Y Level, Achromatic Telescope 11 inches, with Dust Shade and Cross-Hairs graduated Bubble, Object Glass 1½ inch with Rack Movement, Eye Piece adjustable to focus the cross-hairs. Horizontal circle 3 inch, divided to degrees with Vernier reading to 5 minutes. A most service-able and compact instrument. Level complete, with Metal Trivet, Plumb Bob and Adjusting Pins, in Polished Mahogany Box and with Hardwood Tripod each, \$45.00

ARCHITECTS' LEVEL WITH COMPASS



5112

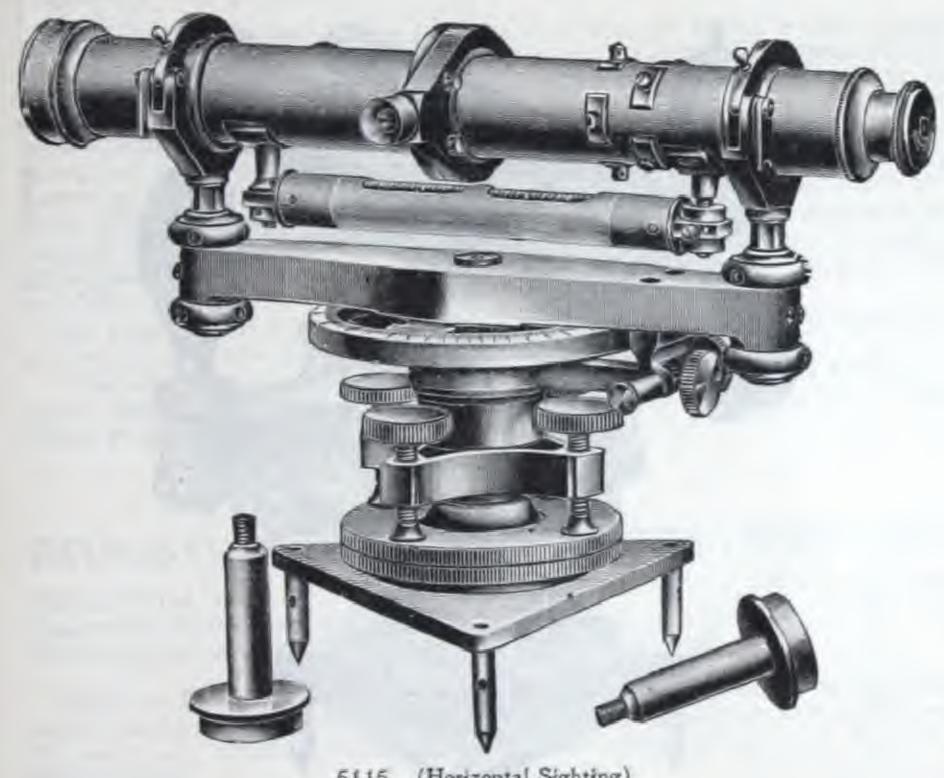
5112. Architects' or Builders' Y Level, Achromatic Telescope
11 inches, with Dust Shade and Cross Hairs, Graduated Bubble, Object Glass 1% inch with Rack Movement, Eyepiece Adjustment, Compass divided on raised ring to degrees, improved Needle about 3 inches, Horizontal Circle 8% inches divided to degrees, with Vernier reading to 5 minutes. A most serviceable and compact instrument. Level complete, with Metal Trivet, Plumb Bob and Adjusting Pins, in Polished Mahogany Box and with Hardwood Tripod

each, \$60.00

65,00

5113. Architects' or Builders' V Level with Compass, like No. 5112, but with Tangent Screw

CONVERTIBLE ARCHITECTS' LEVEL



5115. (Horizontal Sighting)

5114. Convertible Architects' Level, like No. 5110, but with extra Removable Axis to adapt Telescope to sighting vertical lines. Instrument complete, with Metal Trivet, Plumb Bob, etc., in Polished Mahogany Box, and with Hardwood Tripod . . each, \$60.00

Convertible Architects' Level, like No. 5114, but with 5115. 65.00 Tangent Screw . . .

CONVERTIBLE ARCHITECTS' LEVEL

With Compass



5117. (Sighting a Vertical Line)

5116. Convertible Architects' Level, extra Removable Axis,
like No. 5114, but with Compass, like No. 5112, (on
page 650) Instrument complete, with Metal Trivet,
Plumb Bob, etc., in Polished Mahogany Box, and
with Hardwood Tripod each, \$75.00

5117. Convertible Architects' Level with Compass, like

80.00

No. 5116, but with Tangent Screw

BERGHERS' ENGINEER'S DUMPY LEVEL

each, \$100.00 Eugineers' Dumpy Level .

On account of greater compactness, our Dumpy Level is best adapted for railroads, water works, reconnoisance, etc., permitting high accuracy by greater simplicity, and less liability to derangement of parts. It has all the advantages of the larger engineer's levels, but as it consists of a lesser number of pieces and screws, is superior to them in point of durability and permanency of adjustments. With a properly adjusted Dumpy Level, of our make, an engineer can perform as high a class of work as is done with a good wye level, depending, not so much on mechanical perfection as on his own superior skill and sense of accuracy in making adjustments. The upper part of this Instrument is entirely cloth finished

The Instrument is packed in a Mahogany Box, containing a Sun-shade,

a Wrench, a Screw Driver and an Adjusting Pin

Weight of Instrument 10 pounds, weight of Tripod from 7 to 71/2 pounds, gross weight of Instrument, packed securely for shipment, in 2 boxes, about 45 pounds

EXTRAS FOR BERGHER'S ENGINEERS' DUMPY LEVEL

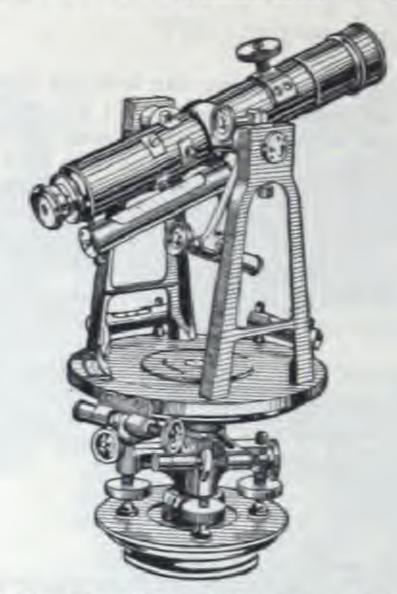
Stadia Wires, fixed . . . Gossamer Waterproof Bag, for protection from rain or dust Bottle of fine Watch Oil, to lubricate the level centre . . .

Note. - The mechanical parts of this Dumpy Level are few and easily made mechanically correct, and there are no working strains in the metal to exert an undue influence upon the adjustments by changes of

temperature The telescope barrel and both uprights are cast in one piece of hard composition metal; and to attain a high degree of accuracy the barrel is bored out truly cylindrical, a condition never attained with drawn tubing. Both ends of the outside tube are slightly larger in diameter, forming collars turned truly concentric to the bore, in principle the same object as collars of a Wye Level Telescope. The bottom surface of the uprights are planed parallel to the bore. The strongly ribbed cross-bar and instrument centre are cast in one piece of hard bell-metal. The centre about which the instrument revolves is fitted and the resting-places for the uprights turned off to be truly at right angles, so that the geometrical axis of the telescope barrel when placed upon them must be at right angles to the centre. The level casing, too, is a casting, and the spirit level is so fastened into this casing as to preclude any strain, and its true form preserved. The focussing slide is of drawn brass turned and closely fitted in the lathe

This Dumpy Level stands as an example of good practice, and many Engineers prefer it to an ordinary Wye Level. The prevailing mistrust can generally be traced to the use of a cheap commercial article

F. & A. CO'.S BUILDERS' TRANSIT



Builders' Transit. Erecting Telescope, 9 inch, with 655. Magnifying Power of 25 diameters and Objective with 11/2 inch aperture. Dust Guard, Sun Shade and Cap. Level to Telescope with Ground and Graduated Bubble. Rack and Pinion Movement to Objective. Imported Spiral Motion to Eyepiece for focusing cross hairs. Clamp and Tangent Screws on Telescope Axis. Telescope reversible to both directions. Horizontal Limb 514 inches, graduated to 1/2 degree, has two rows of figures reading in opposite directions from 0 to 360 degrees. One Double Vernier reading to single minutes. Vernier opening 30 degrees to the line of sight so as to be easily read. Two Plate Levels. Clamp and Tangent Screws to horizontal plates. Shifting Center. Weight of instrument without tripod about 9 lbs. Instrument complete in Mahogany Box with Plumb Bob, Magnifying Glass, Adjusting Pins and Metal Trivet (for Foundation work). Hardwood Tripod

each, \$85.00

656. Extention Tripod instead of Hardwood Tripod, extra " 10.00

Especially for Builders, Contractors, etc., to do more accurate work than with the Architects' Level, saving the expense of a regular Surveyors' Transit. Useful Taking Angles, Leveling Foundations, giving Lines and Elevations for all kinds of Structural Work, especially Re-inforced Concrete and in Bridge Construction when a Compass is not needed

F. & A. CO.'S RECONNOISSANCE TRANSIT



325. Reconnoissance Transit, with Extension Tripod No. 58 each, \$115.00

326. Reconnoissance Transit, like
No. 325, with 4½ inch Vertical Circle, divided to ½
degrees, with vernierreading
to one minute . each, \$120.00

Gradienter Screw, extra . . " \$5.00

Telescope: Achromatic Terrestrial, length 9 inches, Magnifying Power 28 diameters, good definition, reverses at both ends, Stadia Wires. Clamp and tangent movement to telescope axle. Object Glass, 11/8 inch aperture, with Dust

Protector and Cap, Rack and Pinion Movement to telescope slide. Eyepiece with improved screw motion for focusing of cross and stadia hairs. Lovel to Telescope, graduated on the glass.

Vertical Circle, 3½ inches diameter, silvered, graduated to degrees and numbered in quadrants, 0 to 90 each way, reading by one double vernier to five minutes.

Compass: Needle Circle, graduated to ½ degrees, and numbered from 0 to 90 each way. Needle, 35% inches long of hardened and tempered steel. Variation Plate, set by capstan head pinion, Compass Box silvered.

Horizontal Limb, 5% inches diameter, silvered, graduated to ½ degrees, and numbered with two rows of figures reading in opposite directions from 0 to 360. One Double Vernier reading to single minutes, vernier located 30° from line of sight, covered with polished glass and provided with shade for illuminating vernier. Clamp and tangent movement. Two Sensitive Plate Levels.

Leveling Head, Phosphor Bronze, solid construction, four substantial Leveling Screws, Ball and Socket Cups. Shifting Plate, 1/8 inch shift. Gold and Gun Metal Finish, lacquered. Weight of Instrument, 91/2 lbs., Tripod 7 lbs.

Instrument is packed whole and lies in a horizontal position in our new low Mahogany Box. Sun shade, plumb bob, magnifying glass, wrench and adjusting pins are furnished with each instrument.

This instrument is designed for general surveying, which does not require the highest degree of accuracy, and is recommended for rapid and preliminary work where a light portable instrument is desired.

RECONNOISSANCE TRANSIT



Reconnoissance Transit, complete

each, \$115.00

In response to a demand for a very light Transit for rapid work, where extreme accuracy is not required, the Reconnoissance Transit was introduced ten years ago. Its portability, with its capabilities for a large variety of rapid work have already made this a very popular instrument. It has a needle of 3½ inches, a limb of 5 inches in diameter, graduated on Sterling Silver, reading by one double vernier to single minutes, and is supplied with new spring tangent movement like the larger instruments. The Telescope has a power of from 18 to 20 diameters, and is furnished with stadia wires for measuring distances; it has also, as shown, a long level to telescope, vertical circle reading to 5 minutes, and the clamp and tangent to axis

The compass circle is arranged to set off the variation of the needle, the movement being made by a pinion

It has also, as shown, a leveling head with a shifting centre, and with spring clamp and tangent, and the instrument is set upon a light extension tripod, the legs of which close up to about three feet

The weight of this transit without tripod is about 7% pounds; with tripod complete, about 15 pounds

K. & E. ENGINEERS' TRANSITS

With Vertical Arc

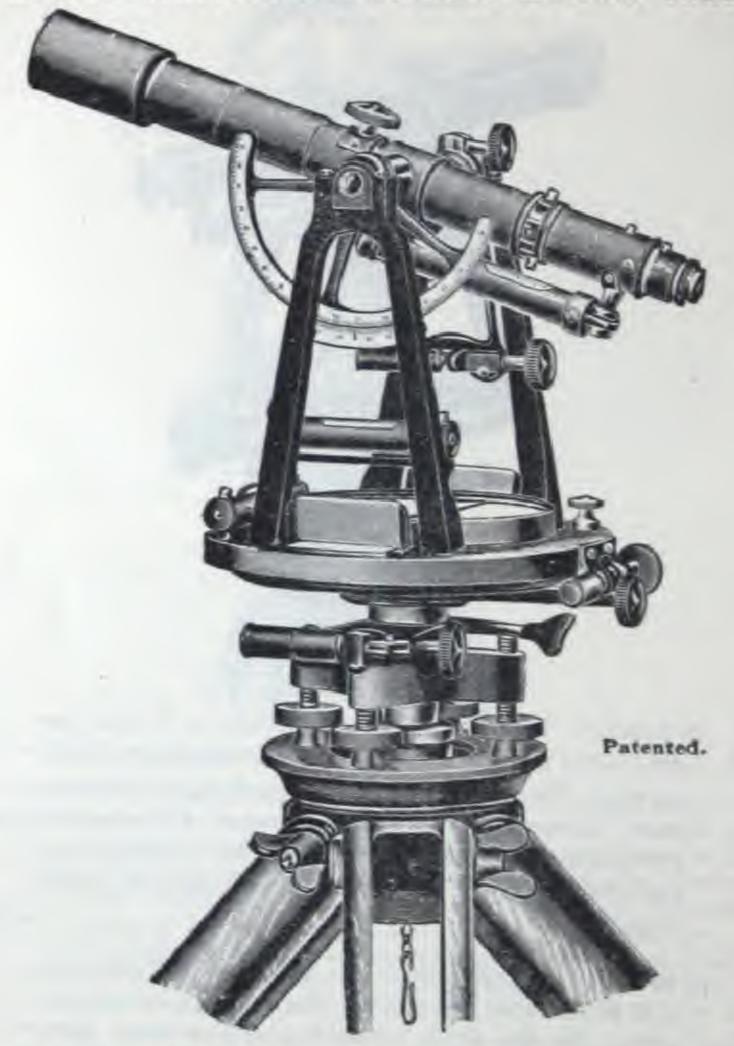


5050 X

5050 X.	graduated on the glass, Arc 5 in. diameter, grad- uated on Silver to half degrees, reading to I minute, with Clamp and Tangent Screws of Improved Pattern with Counter Spring; Needle about 4½ in , horizontal limb 6 in. Instrument complete, with
	Tripod each, \$220.00
5052 X.	Engineers' Transit, like No. 5050X, but Telescope 11½ in., Needle about 5 in., horizontal limb 6½ in. arc 5½ in. diameter. Instrument complete, with Tripod, etc
	The above Instrument with 3 Leveling Screws, (made to order) extra
The a	above Instrument with Telescope with Inverting Eye Piece omical telescope) nade to order without additional charge

BERGHER'S

COMPLETE ENGINEERS' AND SURVEYORS' TRANSITS



No. 1B. As above, with Cloth Finished Standards . . each, \$225 00 Standards finished like Instruments, no Cloth finish . extra, 5.00

The 5 inch Vertical Arc is provided with Double Vernier Reading to minutes

Note. - When Stadia Wires are added, this Instrument becomes a Tachymeter. The Verniers of this Instrument can be placed at 90° to line of sight if so ordered

BERGHER'S

SMALL ENGINEER'S AND SURVEYORS' TRANSIT

nstrument of Precision. Recommended for all kinds of Land Surveying, Railroad Work, etc., where only a Minute Graduation is desired

No. 2. Plain Transit.* The essential features are like those enumerted under No. 1, with the exception of size and weight. It is designed to be used where a lighter instrument is desirable. All the parts, graduations, telescope, etc., are made with as great care as our larger instruments. We recommend it as a very reliable and superior instrument for railroad work, general land surveying and for mining purposes

Dimensions: Horizontal limb 5 inches; magnetic needle 3¼ inches; elescope 9 inches; clean aperture 1½ to 1¼ inch; power 18 diameter

The Mahogany Case has a leather strap, hooks, etc. It contains a Sunhade, Wrench, a Screw Driver, an Adjustable Plumb Bob, a Magnifying Glass, an Adjusting Pin and weighs 7 lbs.; weight of instrument 10 lbs.; weight of tripod from 6½ to 7 lbs.; gross weight of instrument, packed securely for shipment in 2 boxes 40 lbs.

EXTRAS TO BERGHER'S PLAIN TRANSITS

Spirit Level 51/2 in., w	rith C1	amp	and T	ange	entS	crew	to Te	lesco	pe	each,	\$30.00
Gradienter attachme				,		1.				14	5.00
Offsetting arrangem				-					-	11	5.00
Graduation of Horiz	ontal	Circle	e on	Solid	Silv	er				11	10.00
inch Vertical Arc,	Doubl	e Ve	rnier	srea	ding	to m	inute	es		14	15.00
inch Vertical Arc,	gradu	ation	on S	olid	Silv	er	-			66	20.00
inch Vertical Circl	e Dot	able '	Vern	iers r	eadi	ng to	min	utes		66	20.00
inch Vertical Circl	e. ora	duati	on or	Sol	id Si	lver				2.2	25.00
Stadia Wires, fixed	a, Bru								12	1.1	3.00
Short Focus Lens.	One n	air								11	16.00
Variation Plate	one P								-	13	10.00
Silk Bag, to protect	the in	strur	nent.	from	rain	or d	lust		-	5.67	1.00
Bottle of fine Watch	Oil to	o lub	ricate	the	cent	re, et	c., of	trans	it	5.4	.25
Bottle of file Water										rane	eit No

Note.—If a Transit is intended for very close stadia work, Transit No. I, with its larger telescope and higher power will be best suited for that purpose. But in all cases where greater lightness and portability is a factor and where only general good results in stadia measurements, as obtained with a smaller and less powerful telescope, will be deemed satisfactory, size No. 2 should be chosen. We cannot put a telescope of the size as described in Transit No. 1 upon a Transit No. 2. It should be corne in mind that all parts of an instrument are so closely related to each other that the preponderance of any one part would simply impair the efficiency of other parts. A telescope of the size given above, but showing objects inverted, will generally give the desired result. No extra charge for such a telescope, but the instrument must be made especially. The aperture will then be 1 % inch and the power 22 diameter

^{*} A Plain Transit has no spirit level, clamp or arc to telescope, see No. 1

GURLEY'S ENGINEERS' TRANSITS



No. 1.	Engineers' Transit, 2 Verniers to Limb, 4 inch Needle, Plain Telescope*		£145.00
6.	AND THE RESERVE OF THE PARTY OF	cacu,	\$145.00
	The same of No. 1, 5 in Mondia Diale Telescope	- 2	150.00
10	The same as No. 1, 5 in. Needle, Plain Telescope .		150.00
13.	The same as No. 1, 5 in. Needle, with Level on Teles.		
	cope and Clamp and Tangent to Telescope Axis .	410	168.00
14.	The same as No. 1, 5 in. Needle with 41/2 in. Vertical		200,00
2.4	Circle on Silver, reading with Vernier to one		
	minute, Level on Telescope and Clamp, and Tan-		
	gent to Telescope Axis		100 00
15	A TO MALE IN THE PROPERTY OF T		180.00
101.	The same as No. 1, 5 in. Needle with Vertical Arc of		
	3 in. radius, on Silver, and Vernier moved by		
	Tangent Screw and reading to 30 seconds, Level		
	on Telescope and Tangent to Telescope Axis .	16	186.00
16	The same as No. 1, 5 in. Needle, with Vertical Arc of		100.00
*500	The same as No. 1, 5 m. Needle, with vertical Arc of		
	3 in. radius, on Silver, Vernier moved by Tangent		
	Screw and reading to 30 seconds, Level on Teles-		
	cope and Gradienter combined with Clamp and		
	Tangent, as shown	11	198.00

NOTE. - Transits, Nos. 1 to 16 inclusive, furnished with shifting centre to the leveling head, and tripod and leveling screws and tangent to spindle

^{*}A plain telescope is one without any attachments or extras, as we term, such as the clamp and tangent, vertical circle and level

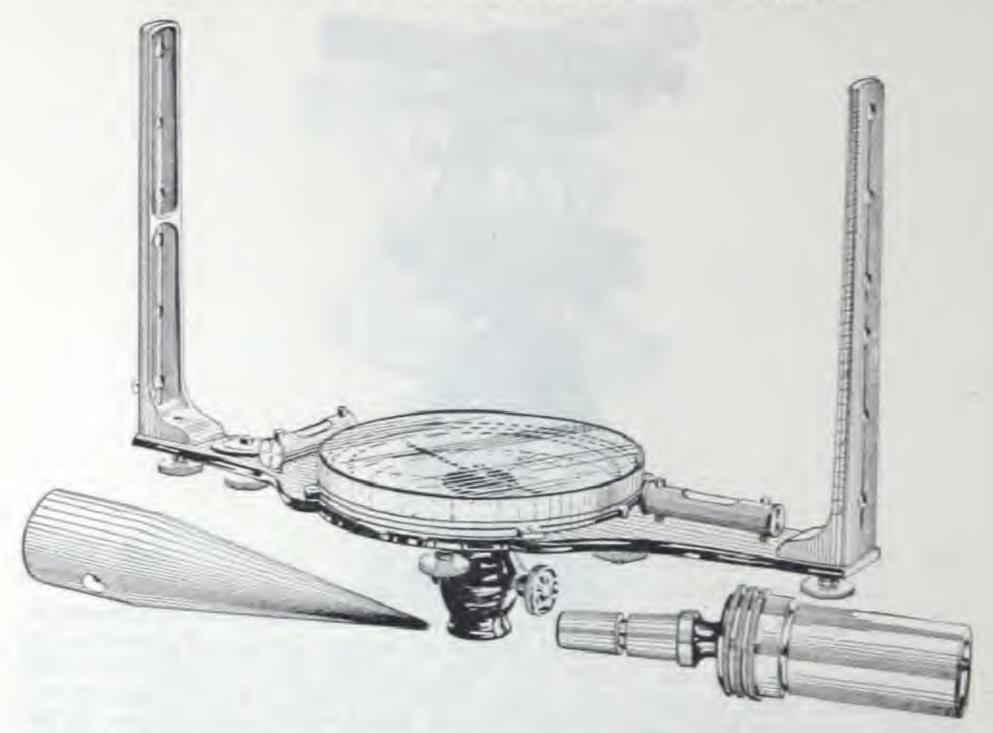
GURLEY'S BUILDERS' TRANSIT



105

In the use of the Architect's Level it was often desirable to determine a point in a vertical plane either above or below the object observed, or to determine points on either side and in line with the centre of the instrument, more conveniently than could be done with the Architects' Level. To meet this want we devised the Builders' Transit, shown in the cut. It has a telescope nine inches long, with long graduated level, clamp and tangent to the axis, a graduated limb reading by an index to one degree, clamp and tangent movement to both limb and leveling head, and plain tripod and trivet plate. The limb is figured in one row from 0 to 180 each way. The objective is moved by a rack and pinion and the eye piece is focused by a spiral movement. Stadia wires are furnished without extra charge if ordered with the Transit. In use the instrument is set up either upon the tripod or trivet, and the plate accurately leveled by the two levels shown upon it. If it is desired to run a level line, the bubble of the telescope level is brought into the centre by the clamp and tangent of the axis, in which position the horizontal wire of the telescope will determine a level line when directed to any point in the horizontal plane, as by the telescope of the ordinary level, and any horizontal angle desired may be read off upon the limb. When desired to obtain points in a vertical plane, either above or below a given point (the plates being clamped and the clamp of the axis released), the telescope may be directed either above or below to the place desired. To determine two points in a straight line with the instrument and on either side of its centre, direct the telescope to one of the points, then clamp the plates, and the other point may be obtained by reversing the telescope on its axis. The Builders' Transit, complete with tripod weighs about 13 1bs.

F. & A. CO.'S SURVEYORS' FIELD COMPASS

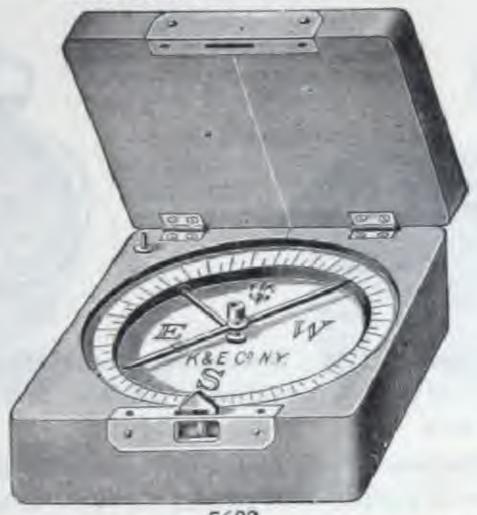


This Instrument is constructed of Bronze metal, grad-657. uated to 1/2 degrees and numbered in quadrants; has a 5 inch Needle, Plate 15 inches, two Spirit Levels, Detachable Sights which have fine slots cut through nearly their whole length, terminated at intervals by circular apertures through which the object sighted upon is more readily found; the N Sightisgraduated on the right and left sides, by which angles of elevations and depressions for a range of 25 degrees each way can be taken with considerable accuracy. The S Sight has two Eyepieces for reading the graduations on the N Sight. Instrument is also furnished with an Outkeeper for keeping tally in chaining; Variation Plate inside the compass box, reading to five minutes, with Thumb and Clamp Screw for setting the magnetic variation of the needle. The Compass is fitted with Ball and Socket for Jacob Staff or Tripod. Complete in Mahogany Finished Box with Tripod

. each, \$40.00

658. This Instrument furnished with Jacob Staff mounting in place of Tripod each, \$35.00

MILITARY COMPASS



5602

Military Compass, 3×3 in., Needle 2 in. with Agate 5602. Centre and Automatic Stop, Divisions on raised ring ' to degrees. Polished Mahogany Box, the sides of which serve as fiduciary edges

each, \$3.50

K. & E. HAND LEVELS







Diagram Showing appearance of field

each, \$8.00 5700. Lock's Hand Level, German Silver, in Case, 5 inch 7.00 5701. The same as 5700, Bronze, in Case, 5 inch 5703. K. & E. Co. Patent Hand Level, Square Tube Bronzed

each, \$4.50 5 inch

In No, 5703 the reflector is a narrow prismoid, crossing the middle of the field of view, so that the field appears on both sides of the reflected bubble, as shown in above diagram. As the lower surface of the tube is flat and parallel with the bubble, this hand level can be used also as a benca level

FROST & ADAMS CO'S MAP MEASURES

CHARTOMETERS



NO. 1692



NO. 1694

No. 1692. Map Measure, 5 in., Swiveling Metal Handle with Lock-nut, Dial with 2 Graduations: Inches, Miles, Centimeters, Kilometers each, \$3.20

No. 1694. Map Measure, Watch Pattern, Dial with 2 Graduations: 12 inches in eighths and 25 feet . . . each, \$2.15

To measure a line, the Instrument is set to 0, and the line is carefully followed in one direction, by the small projecting tracer wheel holding the Instrument vertical. The index hands on the dial will then indicate the distance

BRUNTON POCKET TRANSIT



NO. 5398

This pocket instrument takes the place of a Sighting Compass, Clinometer, Prismatic Compass and Abney or Locke Level. It weighs about 8 oz.

MAGNETIC POCKET COMPASSES





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Ď.	¥	71	Ų

5490.	Fine W	atch Edge	Pattern Compass, Nickel Plated Hunting Bar Needle, with Stop, Metal Dial, 11/2 in	each,	\$2.95
5491.			5490, 134 inches	. 11	3.20
5492.	11	44	5490, but with Singer's Card Dial, 11/2 in	14	2.35
5493.	48		5492, 1¾ inches	. 44	2.65
5494.	24	11	5492, but with Singer's Pearl Dial, 134 in		3.85



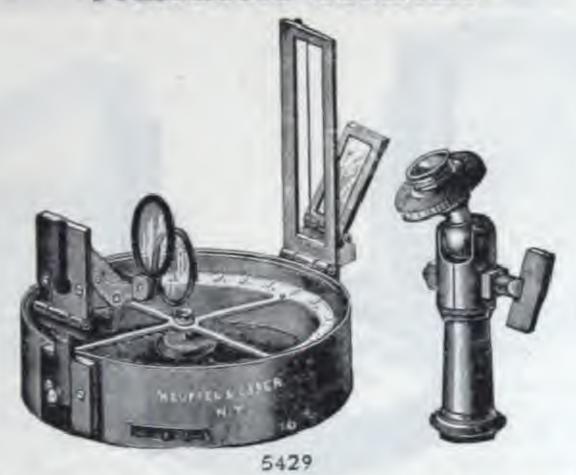
5510. Fine Brass Mariner's Compass, Bronzed Brass Hunting Case, Floating Pearl Dial, 1/8 inch diameter, with Luminous North and South Points, suspended in Nickel Plated Collapsing Gimbals, with Stop . . each, \$8.55

Magnetic Pocket Compasses - continued





PRISMATIC COMPASS



5428. Prismatic Compass, 3 in. with Floating Metal Dial,
Socket for Jacob Staff, in Mahogany Case each, \$12.85

5429. The same as 5428, 334 in. with Azimuth Glasses, Ball

Joint and Socket for Jacob Staff, in Morocco Case " 21.50

For Tripod for Prismatic Compasses, see page 458

SIGHT COMPASSES

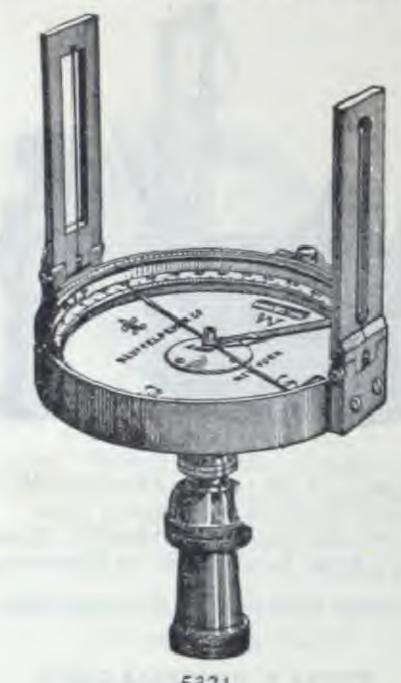






5450

K. & E. SURVEYING COMPASS



Surveying Compass, with Folding Sights, graduated to degrees, Variation Plate, 2 Level Bubbles, Ball Joint and Socket for Jacob Staff Mountings, Needle about 31/2 inch, in Polished Mahogany Case . each, \$16.00 5321. The same as 5320 Needle about 4 inches, in Polished Mahogany Case The same as 5320 Needle about 41/2 inches, in Polished . " 20.00

Compasses Nos. 5320 to 5322 are of the most practical construction and very carefully and substantially made. The variation of the needle is set off by means of a pinion with capstan head, which admits of the most delicate adjustment and is protected from dust and rain

COMPASSES AND CLINOMETERS



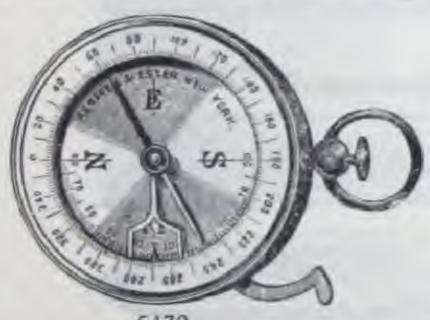
5460.

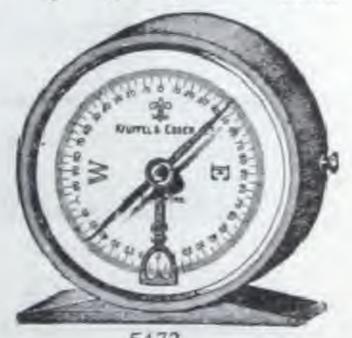


As a Sight Compass

Bronzed Sight Compass and Clinometer, 2½ in. diameter, graduated to degrees, Edge Bar Needle and Stop.

Sights connected by bar across top, which when turned down serves as fiduciary edge for using as a Clinometer, graduated to give slopes in inches per yard and in degrees. Practical for taking angles, bearings of walls or strata altitudes, etc. Its lightness and small size add to its usefulness. In Mahogany Box . each, \$7.25

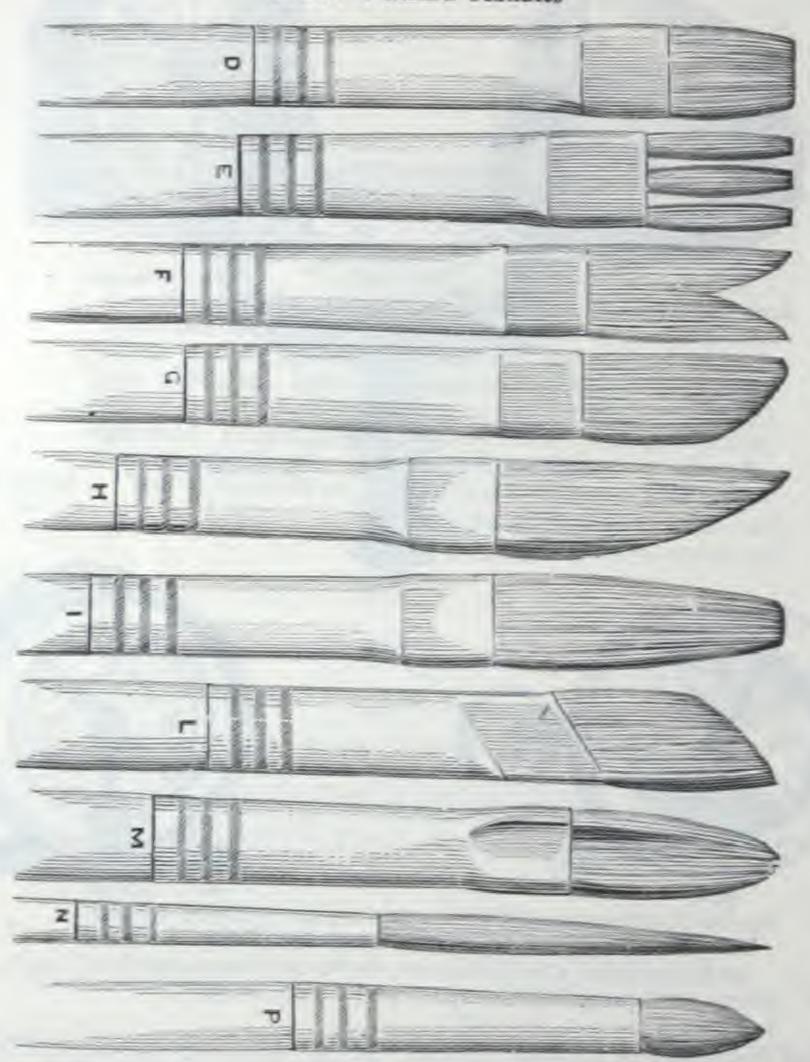




This Geological Compass, devised by the Harvard Geological Department, is used there to a great extent, giving excellent satisfaction. It is of brass, bronzed; 2 inches diameter, inch thick, solid base. The silvered dial is divided to degrees, numbered in quadrants, the needle is of the most approved pattern, with agate center and stop. The pendulum clinometer is very sensitive and can be read closely. Weighs 3½ ounces

WINSOR & NEWTON'S SPECIAL EXTRA FINE BRISTLE BRUSHES

Yellow Polished Handles



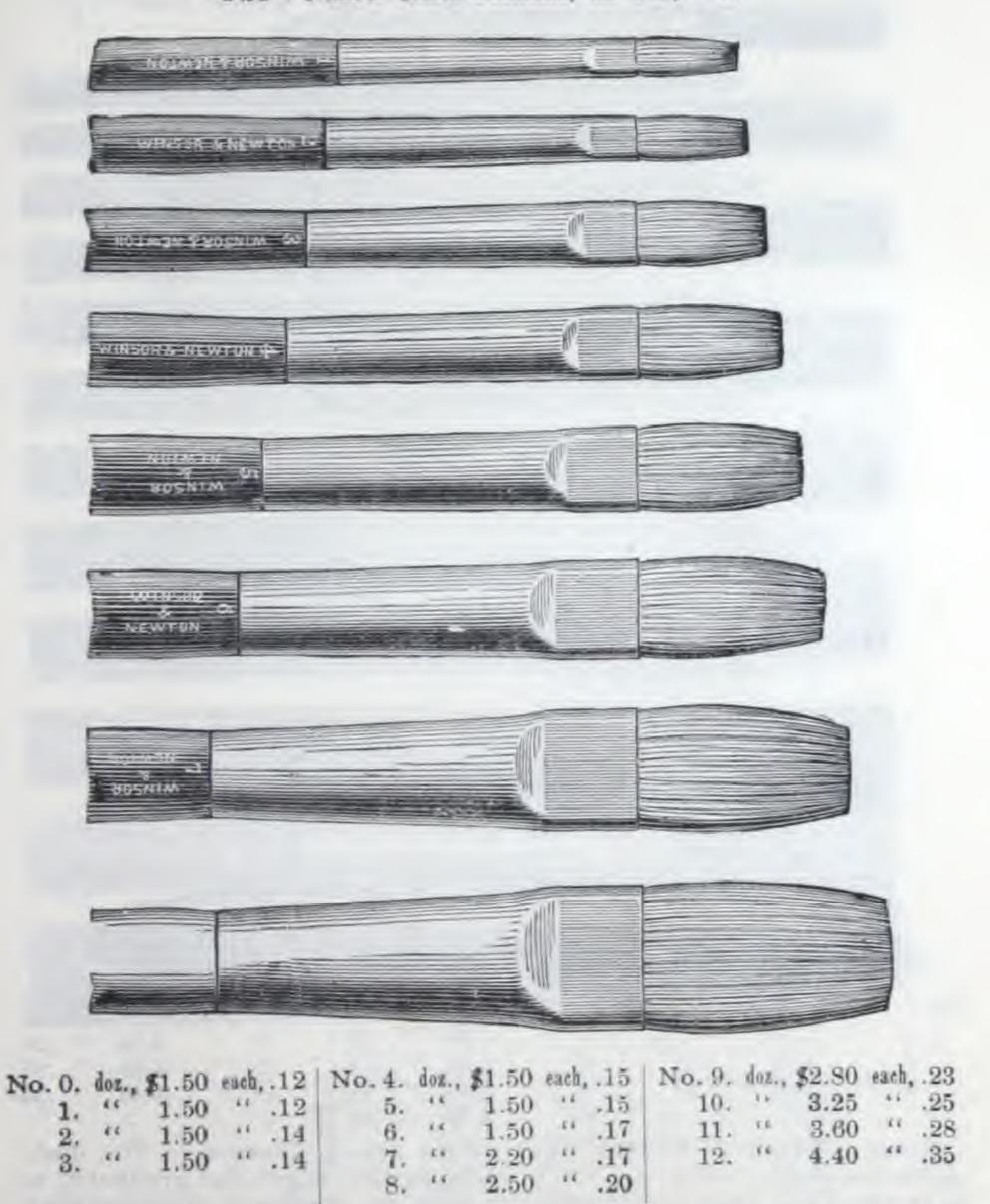
Any of the above shapes in various sizes

each, .25

Note.— These Brushes are made after patterns suggested by some of the most eminent artists of the day. The hair used is specially prepared to insure the Brushes keeping their peculiar shapes

WINSOR & NEWTON'S BRISTLE BRUSHES

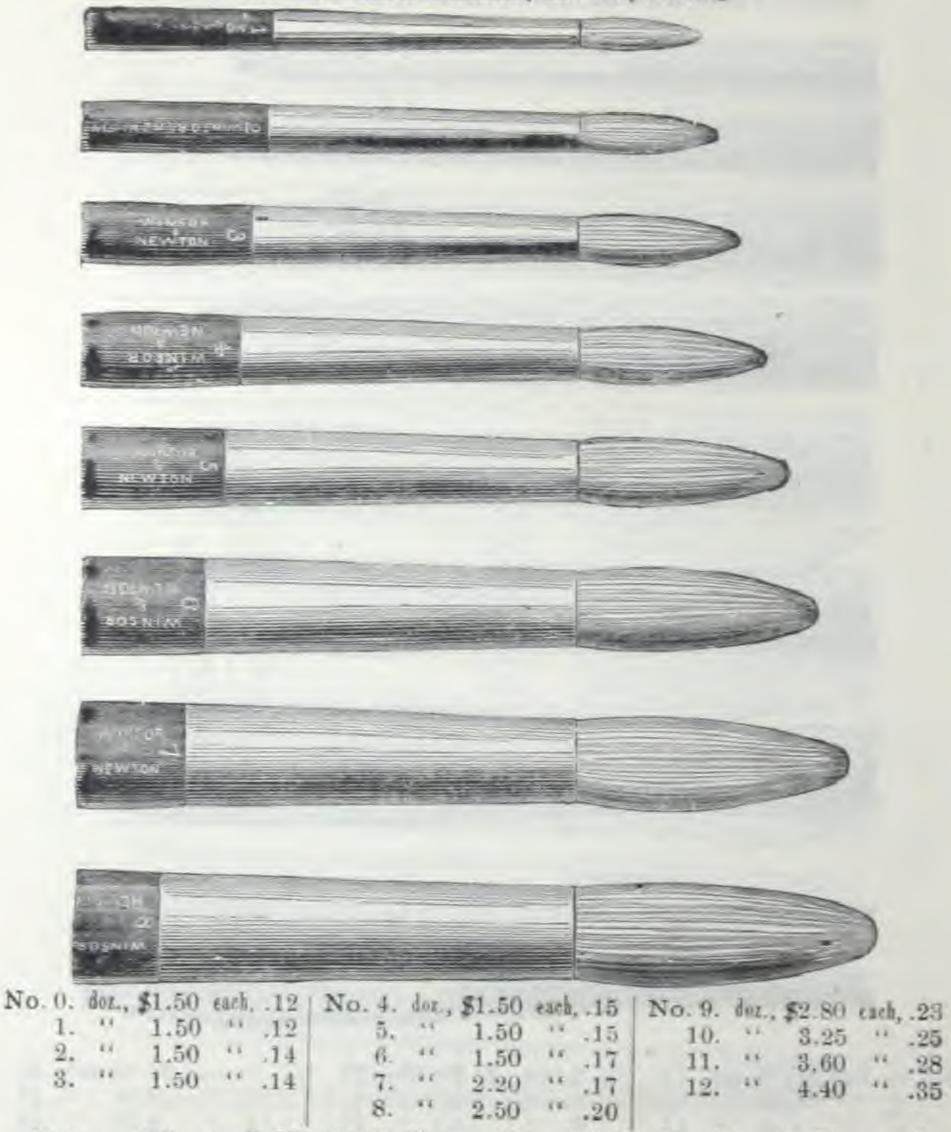
Red Polished Cedar Handles, in Tin, Flat



Note. - Winsor & Newton's Bristle Brushes are made from selected stock, and are recommended for their superior toughness and durability

WINSOR & NEWTON'S BRISTLE BRUSHES

Polished Cedar Handles, in Tin, Round



Note.—Winsor & Newton's Extra Fine Bristle Brushes, in Tin, made of the finest and softest Lyons' Bristles, feather edged and graduated so as to blend and keep well together in working, ranging in grade between Sable Hair and Ordinary Bristle Brushes, combining somewhat of the softness of the former with the firmness of the latter

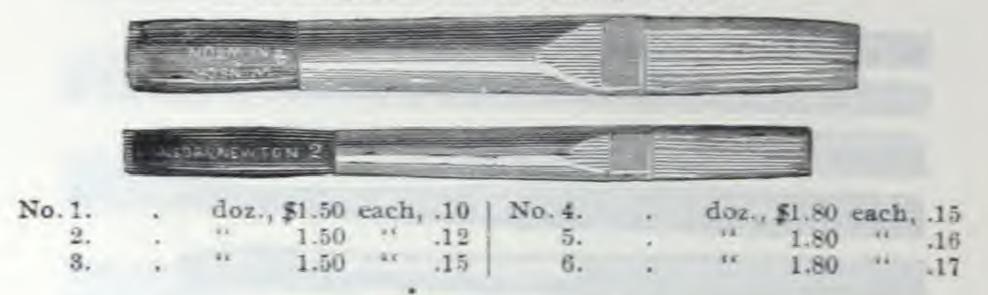
WINSOR & NEWTON'S BRISTLE BRUSHES, SERIES C

In Polished Natural Cedar Handles, American Sizes, Round and Flat



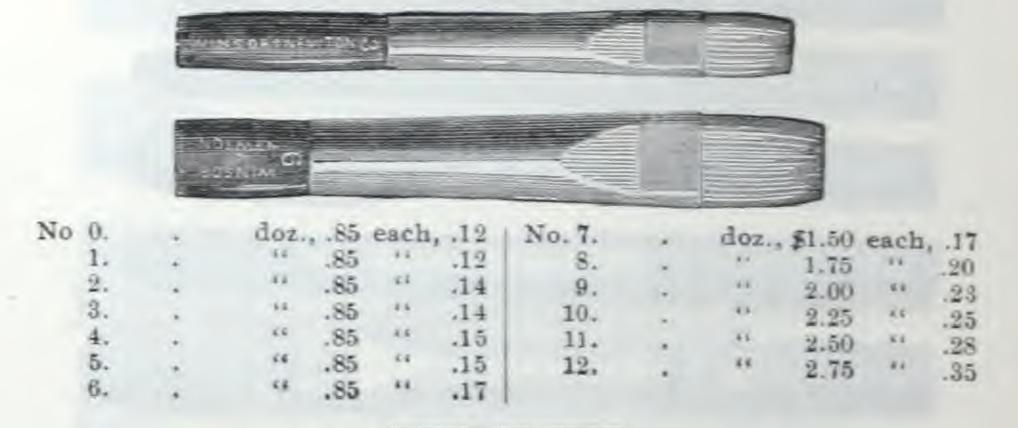
WINSOR & NEWTON'S "LANDSEER'S" BRISTLE BRUSHES

Very Long and Thin of Hair, in Tin, Flat



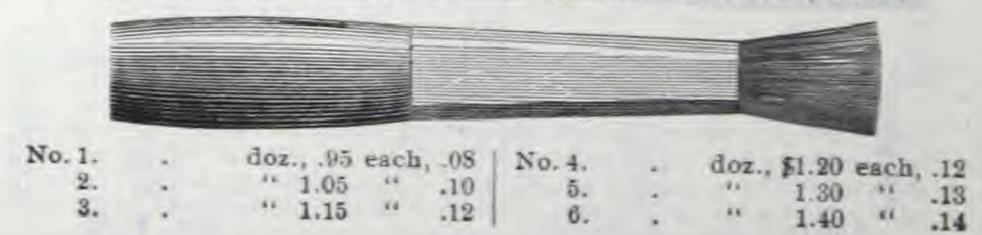
WINSOR & NEWTON'S "BRIGHT'S" BRISTLE BRUSHES

For Landscape, etc. Short and Full of Hair, in Tin



BRISTLE POONAH BRUSHES

For Wax Flower Painting. Polished Handles, Tin Ferrules, Round



ARTISTS' FRENCH BRISTLE BRUSHES

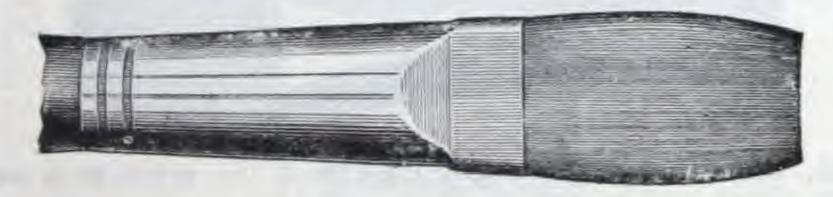
For Oil Painting. Plain Whitewood Handles, Tin Ferrules, Round and Flat



No. 1.	doz.,	.45	each,	.05	NO. 5.	doz.,	.60	each,	.07	No.	9.	doz.,	.85	each,	.09
2.	64	.50	3.5	.05	6.	4.6	.65	1.5	.07		10.	1.4	.90	**	.09
3.	16	.55	146	.06	7.	11	.70		.08	1	11.	- 66	.95		.10
4.	6.6	.55	.6.6	.06	8.	11	.80	11	.08		12.	48	1.00	66	.10
	Asso	orte	d, N	o. 1 t	o No. 12						d	oz.,	.75		

EXTRA LARGE FRENCH BRISTLE BRUSHES

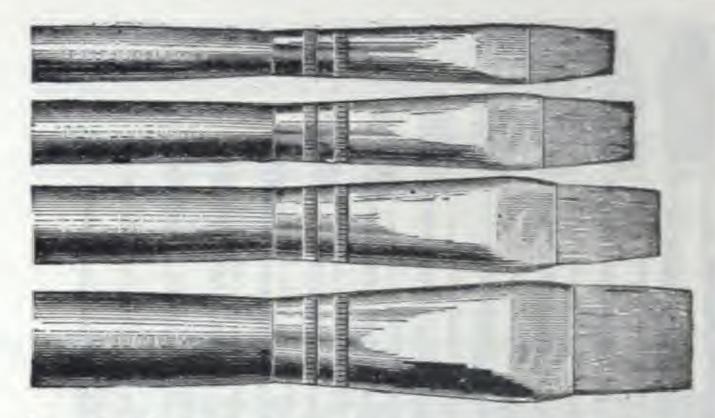
For Oil Painting. Whitewood Handles, Flat



No. 13.	1/2	in.	per dozen,	\$1.10	each,	.12	No.	19.	1	in.	per dozen,	\$2.25	each.	, .22
14.		21	4.1	1.20		.13		20.	11/8		9.5	2.50	1.1	+25
15.		33.	94	1.35		.14		21.	13%	4.2	3.6	2.75	11	.27
16.		60	3.6	1.50		.15		22.	134	11	144	3.00	13	.30
17.	76	3.5	144	1.75		.18		23.	154	4.1	11	3.50	4.6	.35
18.	1	14	9.6	2.00		.20		24.	114	10	14	4.10	**	.40
Assorted	, 1	3 to	24							4	per	dozei	1, \$	2.25

ARTISTS' "BRIGHT'S" FRENCH BRISTLE BRUSHES

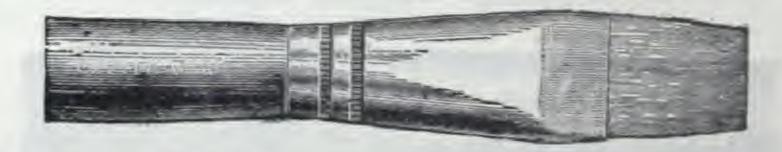
For Oil Painting. Plain Whitewood Handles, Tin Ferrules, Flat



doz., .45 each, .05 | No. 5. doz., .60 each, .07 | No. 9. doz., .85 each, .09 No. 1. .05 6. " .65 " .50 10. " .90 " .07 .09 .06 .55 .70 " .08 11. .95 .10 8. " .80 " .55 " .06 .08 " 1.00 " .10 Assorted, No. 1 to No. 12 doz., .75

EX. LARGE "BRIGHT'S" FRENCH BRISTLE BRUSHES

For Oil Painting. Plain Whitewood Handles, Tin Ferrules, Flat

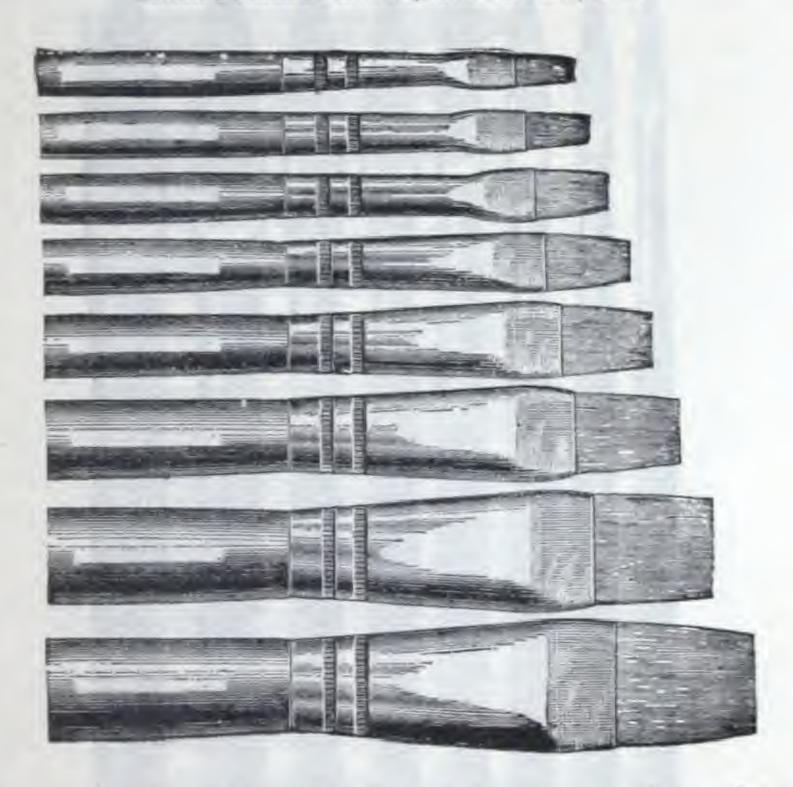


No. 13.	1/2	in.	per dozen	\$1.10	each	, .12	No. 19	. 1		ín.	per dozen,	\$2:25	each.	.22
14.				1.20	0	.13					-0.7			
15.	56	Y.C.	3.6	1.35	17	.14					9.4			
- 16.	34	11	94	1.50	11	.15		. 1						
17.	3/8	15.5	44	1.75	16	.18	28	. 1	×	T.L		3,50		
18.	1	10	74.	2.00	U	.20	24	. 1	34	11		4.10		
Assorte	d, 1	3 to	24 .			4					per	doze	n, \$	2.25

F. W. DEVOE & CO'S

ARTISTS' "BRIGHT'S" BRISTLE BRUSHES

For Oil Painting. Firm, Square Touching and General Landscape Work
Black Polished Handles, Tin Ferrules, Flat



No. 2-0.		loz.,	.75 e	ach,	.07	No	4.	1		doz.,	.75	each,	.08
1-0.	121	11	.75	16	.07		5.			- 6.6	.85	44	.10
2.	*	11	.75	16	.08		6.			1.6	.90	3.6	.10
	Assorted,	No.	1003	No.				1.0	*	doz	., .7	5	

F. W. DEVOE & CO'S

ARTIST'S "BRIGHT'S" BRISTLE BRUSHES

Extra Wide for Oil Painting. Black Polished Handles, Tin Ferrules, Flat

No. 7.	Win.	doz.,	\$1.25	each,	.12	1	No. 10.	11/8	in,	doz.,	\$1.75	each,	.18
9	3% 1.	"	1.45	- (1	.14	ı	11.	114	**	61	2.00	"	.20
9.	1 11	5.6	1.60		.15		4 (1)	11/2	**	**	2.25	**	.25

FROST & ADAMS CO'S "SUPER" BRISTLE BRUSHES

For Oil Painting. Black Polished Handles, Flat

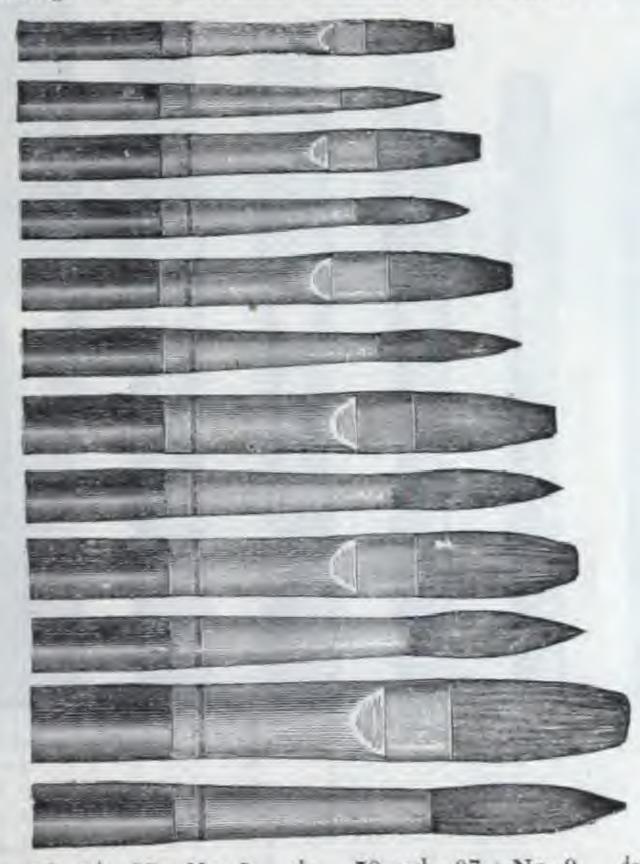


No. 00.	. 4	doz.	, .60	each	, .07	No. 3.		doz,	, .65	each	1, .08
0.			.60	16	.07	4,		16	.65	11	.08
1.		41	.60	(i)	.07	5.		4.8	.70	17.	.09
2.	*	44	.60	11	,07	6.	21	16	.70	**	.09
	Asso	orted N	To. 00	to I	No. 6	14 4		doz., 6	5.		

FROST & ADAMS CO'S

LYONS' ARTISTS' SUPERFINE BRISTLE BRUSHES

For Oil Painting. Yellow Polished Handles, Tin Ferrules, Round and Flat



No. 1. 2. 3. 4	11 1	60 65	AV.	.05 .05 .06 .06	6. 7.	**	.70 .75	14	.07	11.	1 1 00	11	.09
					o No. 12				*		doz., .90		

FROST & ADAMS CO.'S BRIGHT'S BRISTLE BRUSHES



No. 1. doz., .60 each, .07 | No. 3. doz., 70 each .09 | No. 5. doz., .80 each, .12 2. '' .65 '' .08 | 4. ' .75 '' .10 | 6. '' .85 '' .14

RUBEN'S ARTISTS' FLAT & ROUND BRISTLE BRUSHES

Made of Selected Bleached Bristles, in Nickel Plated Ferrules, Yellow Polished Handles



No. 1. 2. 3. 4. 5.		doz.,	\$1.35 1.60 1.90 1.95 2.05	each,	.12 .13 .14 .14	No. 7. 8. 9. 10.	 doz.	\$2.45 2.65 2.90 3.15	16	.23 .24 .25
6.		3.6	2.20	11	.17	11.	61	3.45	11	.28
	Assor	ted, No	o. 1 to	No. 1	2 .	-	 doz	, \$2.50)	.35

RUBEN'S ARTISTS' FLAT BRISTLE BRUSHES

Extra Large Series

No. 1. 2.	-	402,	1.80	each,	.18	No. 7.		doz.,	84 20	each,	.42
3,		11	2.40	Ki.	.24	9.	*	11	4.80	11	.48
5.		96	3.00	***	.30	10.	2	- 11	5.40	11	.54
6.		iii	3.60	11	.30	11.	*	61	7.80	e,	.78
	Anna	rted, N	2200			12.	*	.0.	9.00	· ·	.90

FROST & ADAMS CO'S

EXTRA FINE BRISTLE "FAN" BRUSHES

For Light Touching, Slight Dragging, Scumbling, Hair, Foliage, Herbage, etc.



No. 1.		doz.,	\$1.10	each,	.20	No. 4.	doz.,	\$2.50	each,	.25
2.	2	6.6	1.50	1.6	.20	5.	41	3.00	4.6	.25
3.		**	2.00	10	.20	6.	100	3.50	13	.25

FROST & ADAMS CO'S

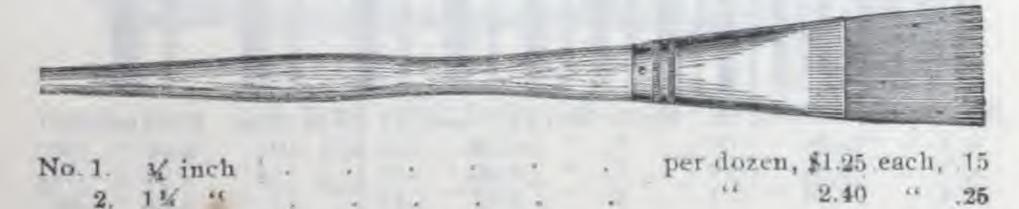
"LANDSEER'S" BRISTLE BRUSHES

For Oil Painting. Polished Handles, Tin Ferrules, Flat

		1.470.4 1.470.4								Charles	
No. 1.		doz.	.65	each,	.10	No.4.	4	doz.,	.80	each,	.16
2.		16	.70	. 11	.12	5.	+	8.5	.85	et.	.18
3.	-	EL	.75	11	.14	6.		44	.90	.63	.20

LIBRARY BRISTLE PASTE BRUSHES

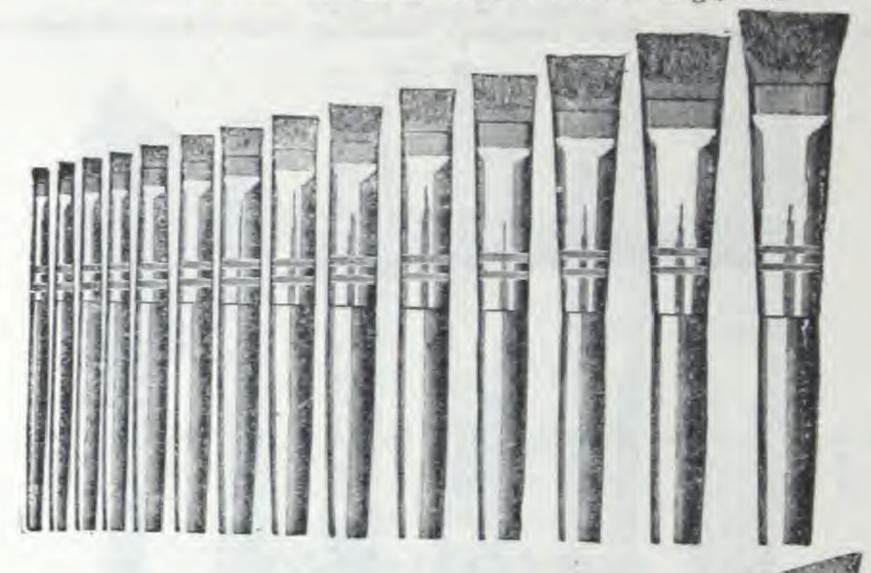
Cedar Handles, Nickel Ferrules

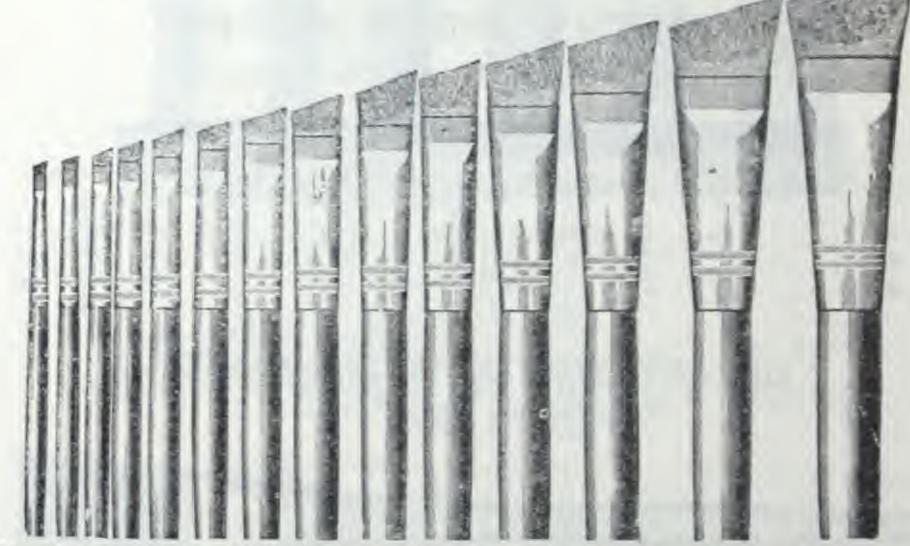


2, 11/4 "

TAPESTRY PAINTING BRISTLE BRUSHES

Polished Handles, Square or Angular Chiseled Edge, Flat

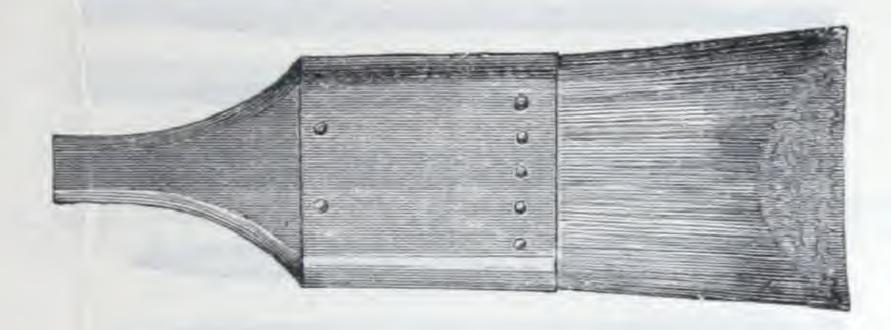




7.00 5.00 6	WIND DOM: NO. 1 TOTAL		COR. NO. 1	100	1800	- D. CHE	-	D	-		_	
No. 1.	doz., .81 sach08	No. 5.	doz.,	\$1.12	each.	13	No.	9.	doz.	\$1.64	each.	.16
2.	0009	6.	6=	1.20	44.	.13				2.08		
3.	"1.02 " .10	7.	X.0	1.35						2.38		
4.	" 1.10 " .11	8.	14	1.52	44	.15						

SUPER BRISTLE VARNISH BRUSHES

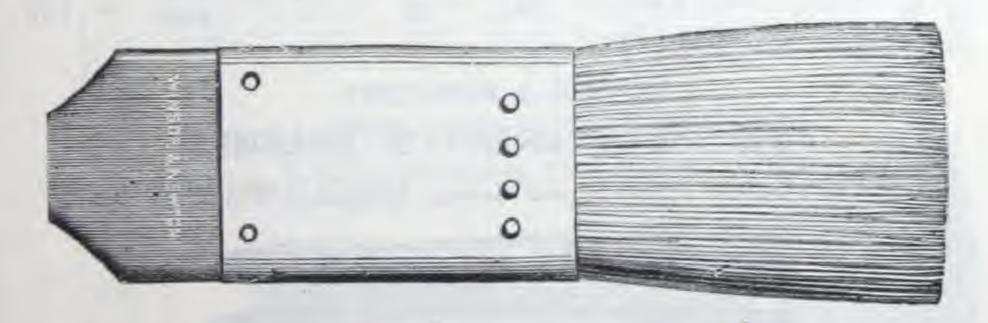
Chiseled Edge, Cedar Handles, in Tin, Flat



1 in	wide	doz.,	\$1.85	each	.20	3 in	. wide	doz.,	\$ 9.00	each	, .75
	11					31/2		- (1	13.20	44	1.00
2	14	14	4.45	16	.35	4	16	6.6	16.80	66	1.25
21/2	11	16	6.55	1.6	.50						

BRISTLE VARIVISH BRUSHES

Cedar Handles, in Tin, Nailed, Flat



1	in. wid	e doz.,	\$1.30	each,	.15	21/2	in. wide	doz.,	\$5.00	each,	.38
134	4 11	4.6	2.05	- 66	,20	3		116	7.00	61	.45
2	16	11	3.85	- (1	.30	4	14	44	12.00	**	.60

WINSOR & NEWTON'S RED SABLE BRUSHES

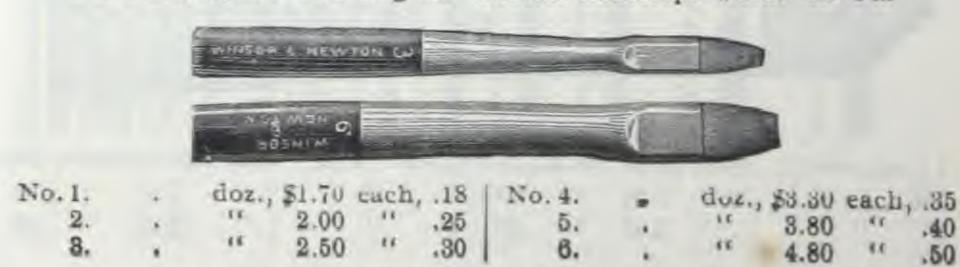
For Oil Painting. Red Polished Cedar Handles, in Tin, Flat and Round



WINSOR & NEWTON'S

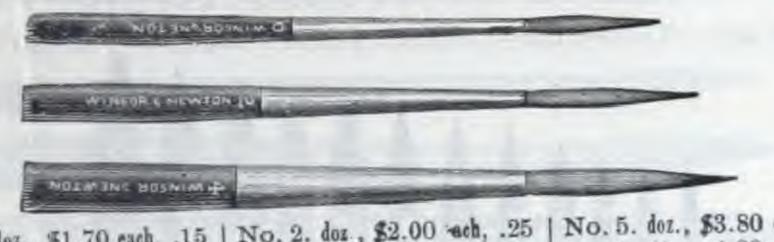
FINE SABLE "BRIGHT'S" BRUSHES

For Firm, Square Touching and General Landscape Work. In Tin



W. & N. FINE RED SABLE RIGGER BRUSHES

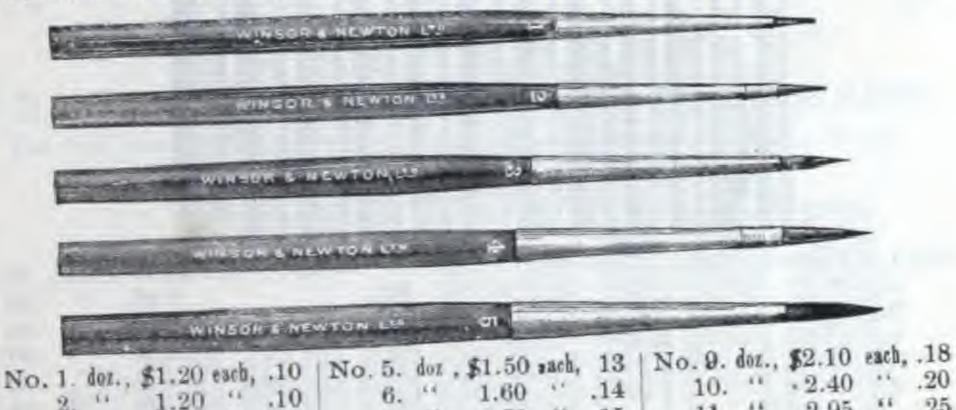
For Delicate Work, Fine Line Drawing. In Tin



No. 0. doz., \$1.70 each, .15 | No. 2. doz., \$2.00 each, .25 | No. 5. doz., \$3.80 each, .40 1. " 1.50 " .18 | 3. " 2.50 " .30 6. " 4.80 " .50 4. " 3.30 " .35 |

W. & N. FINEST RED SABLE BRUSHES

Red Polished Cedar Handles, Nickel Ferrules, American Sizes, Flat and Round



1.20 2.95 " .25 11. .15 1.70 1.30 " .11 3.55 " 12. " .40 8. " 1.95 " .17 1.35 " .12 4. 11

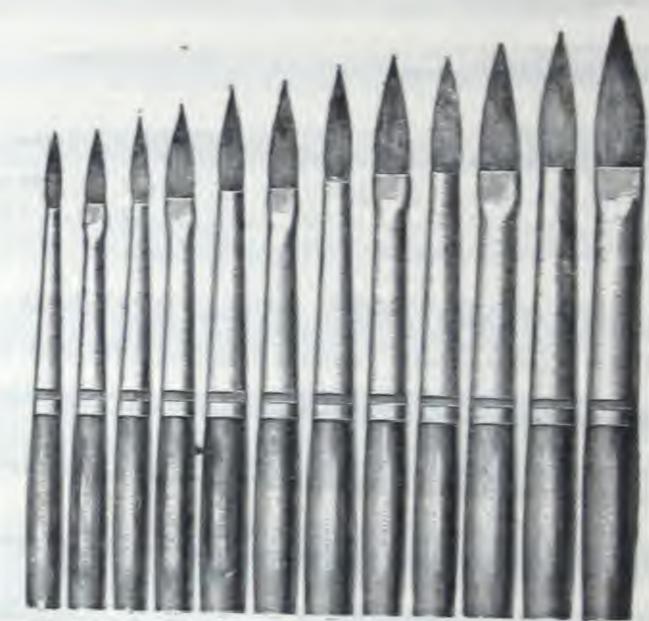
W. & N. FINE SABLE FAN BRUSHES

For Light Glazing, Softening, Scumbling, Hair, Foliage. In Tin

TOI DIE										
		4				1				
		-			-					
No. 1.			each,	.50	No. 4.			each,	.60	-
2.			14	.55	5.		200	**	.00	
3.	-		66	.55	6.			**	,00	

FROST & ADAMS CO'S ARTISTS' RED SABLE BRUSHES

For Oil Painting. Polished Handles, Nickel Plated Ferrules, Round and Flat



No. 1.	**	doz.	.70 .75	each	.10	No. 7. 8.	Round	doz.,	\$1.70 1.85	each,	
3.	61	27	.85	14	-15	9.	36	3.6	2.00	-600	26
4.	**	11	1.00	11	.18	10.	Re-	100	2.25	11	-28
5.	17	22	1.10	11	.20	11.	40	48	2.75	de	.30
6.	164		1.25	4"	.22	12.	- 44	46	3.30	10	.32
	Assorted,	No.	1 to	No 1	12 .	-	*	doz.	, \$1.60	Ď.	

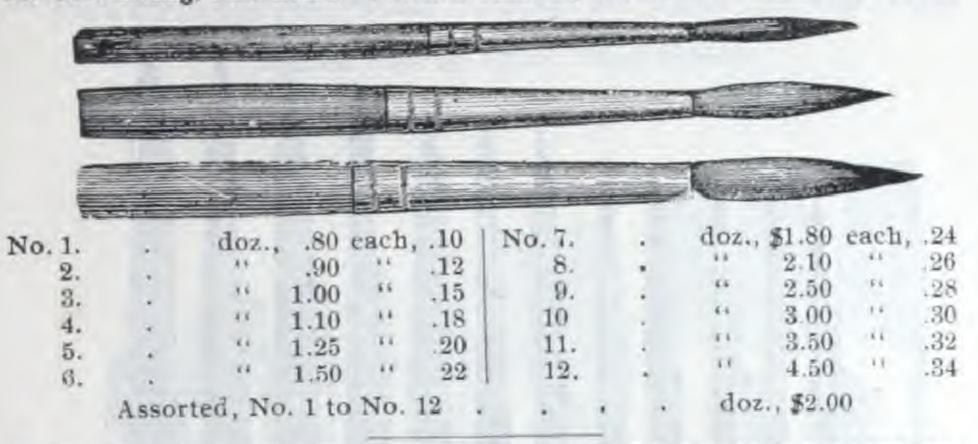
FROST & ADAMS CO'S ARTISTS' RED SABLE BRUSHES

For Oil Painting. Polished Handles, Nickel Plated Ferrules, Flat

No. 1.	Flat	doz.	.70	each,	.09	No. 7.	Flat	doz	\$1.70	each	99
2.	41	44	.75	81	.11	8.	VA.	88	1.85	11	.24
8.	10	11	.85	KY.	.13	9.	1.6	VK.	2.00	80	.26
5.	4.0	10	1.00	811	.15	10,	(1)	66	2.25	éé	.28
5.	46	18	1.10	110	.16	11	110	16	2.75	ar	
6.	XI		1,25	-91	.20	12.	-11	15	3.30	11	.30
	Assorted	, No.	1 to	No. 1	2 .	.00		doz	, \$1.60)	

FROST & ADAMS CO'S FINE RED SABLE RIGGER BRUSHES

For Oil Painting, Fine Lines. Polished Handles, Nickel Plated Ferrules, Round



F.&A.CO'S ARTISTS' "BRIGHT'S" RED SABLE BRUSHES

For Oil Painting, Firm Square Touching and General Landscape Work.

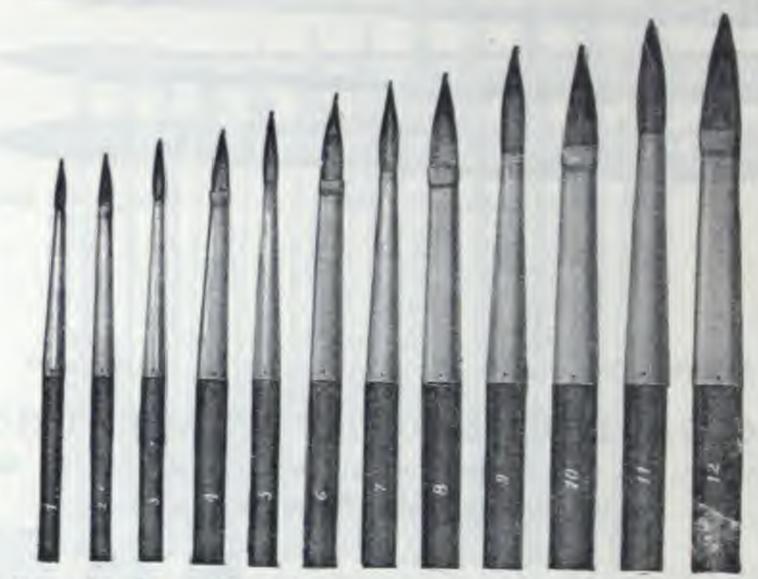
Polished Handles, Nickel Plated Ferrules, Flat



No. 1. doz., \$1.00	each 12	No. 5.	doz	\$2.00	each.	.20	No	. 9	doz.,	\$4.00	each,	.35
2. " 1.10	.14	6.	66	2.50	1.0	.25		10.	44.	4.70	44	.40
	0 .16		16	3.00				11.	*1			.15
4. " 1.75					11	.30		12.	KL	6.60		.50
	d No. 1			4				d	oz.,	\$2.50		

FROST & ADAMS CO'S ARTISTS' RUSSIA SABLE BRUSHES

For Oil Painting. Polished Handles, Nickel Plated Ferrules, Round and Flat



No. 1.	Round	doz.,	.55	each	.08	No. 7.	Round	doz.,	.95 1.00	each,	
3.	414	11	.60	4.1	.10	9.	12	10	1.05	XI	.16
4.	10	166	.65	14	.11	10.	1.6	11	1.15	12	.18
5.	41	**	.75	4.4	.12	11.	3.6	15	1.25	44.	.20
6.	11	4.5	.85	K W.	.13	12.	10	14	1.40	CA.	.21
	Assorted,	No.	1 to	No.	12 .	* .		doz.,			

FROST & ADAMS CO'S

ARTISTS' RUSSIA SABLE BRUSHES

For Oil Painting. Polished Handles, Nickel Plated Ferrules, Flat

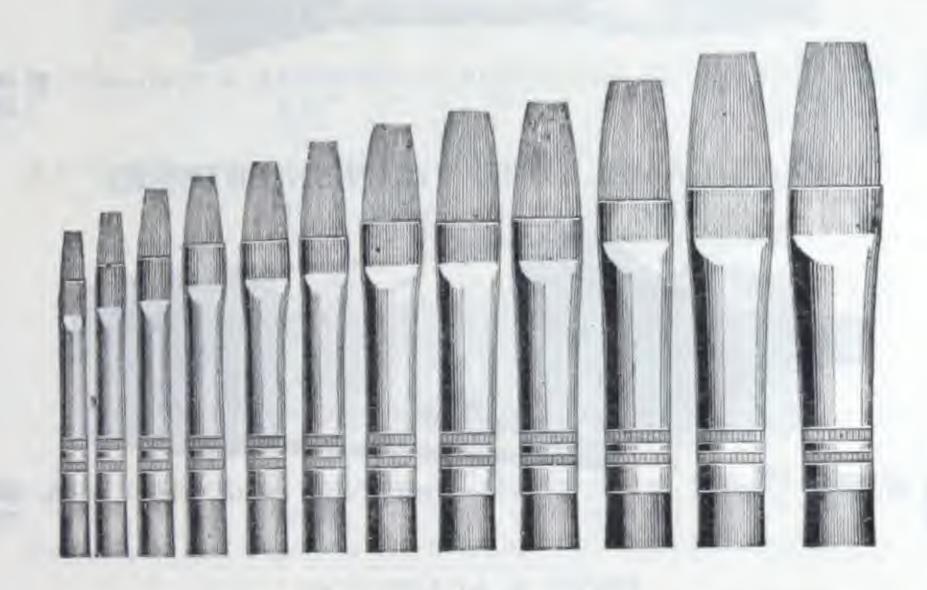
No. 1. 2.	Flat	doz.	.55	each	.07	No. 7. 8.	Flat	doz.,			
3.	16	**	.60	11	.09	9.	XI	11.	1.00	41	.15
4.	66	44	.65	41	.10	10.	48	11	1.15	11	.16
5.	14	11	.75	X4.	.11	11.	11	3,0	1.25	16	.18
6.		200	,85	- 66	.12	12.	346	44	1.40	44	.19
	Assort	ed, No.	1 to	No.	12 .	4		doz.,	\$1.00)	150

FROST & ADAMS CO'S

ARTISTS' "BRIGHT'S" RUSSIA SABLE BRUSHES

For Oil Painting, Firm, Square Touching, and General Landscape Work.

Polished Handles, Nickel Plated Ferrules



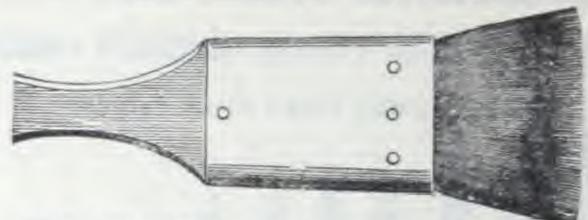
No. 1.		doz	70	each	10	No. 7.		doz.	\$1.40	each	, .18
		44		16	.11	8.		61	1.55	- (1	.20
2. 3.		81	.85	44	.12	9.	4.	11	1.70	16	.22
		11	.90	11	.13	10.	*	11	1.95	44	.24
4.		44	1.00	16	.14	11.		11.	2.25	3.1	.28
5.			1.30	-10	.15	12.		881	2.40	66	.30
6.	Assort			No				do	z., \$1.1	5	

EXTRA WIDE, FLAT

No.	10.	36 in	. wide	doz.	\$2.50	each,	.35	No. 16.	34 i	n wide	doz.,	\$4.50	each,	.50
240.	11	1/	11	16	2.70		.40	18.	7/8	16	A.E	5.75	2.6	.55
	14	56	**	46	3.60			20.	1	-66	4.6	8.00	46	.80

FRENCH CAMEL HAIR MOTTLERS OR SPALTERS

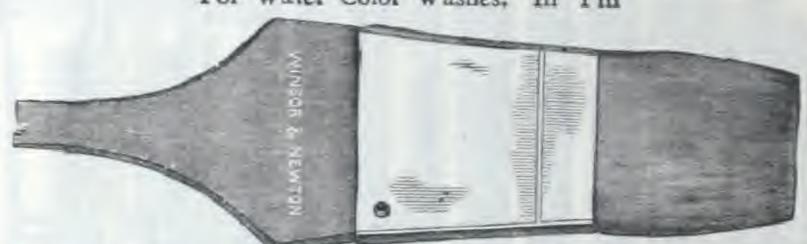
Short Stained Handles, Riveted



1 in. wide each, .25 | 134 in. wide each, .60 | 2½ in. wide each, \$1.00

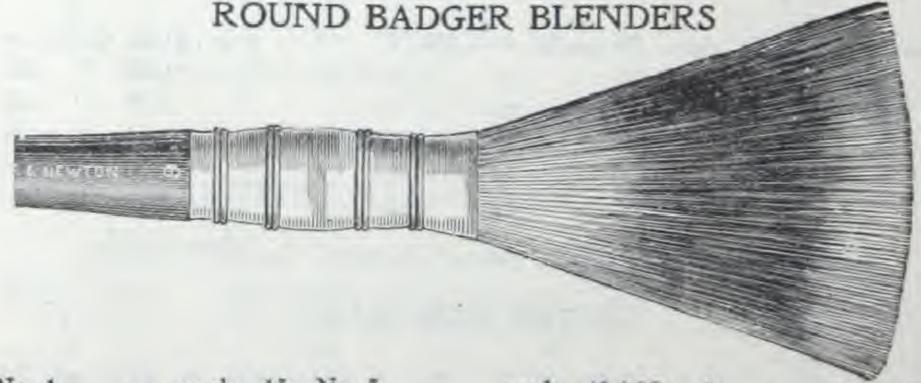
FLAT CAMEL HAIR VARNISH BRUSHES

For Water Color Washes, In Tin



½ in. wide each, .25 | 1½ in. wide each, .40 | 1¾ in. wide each, .65

FROST & ADAMS CO'S



No. 1.		each,	.15	No. 5.	-	each	, .40	No. 9.		each, .85
2.		ei	,20	6.		(4)	50	10.		.96
3.	4.	-61	.25	7.		4.6	.80	11.	1	1.10
4.		-6.6	.30	8.		-6.6	.70	12.		" 1.20

FROST & ADAMS CO.'S

BRUSHES FOR CHINA PAINTING

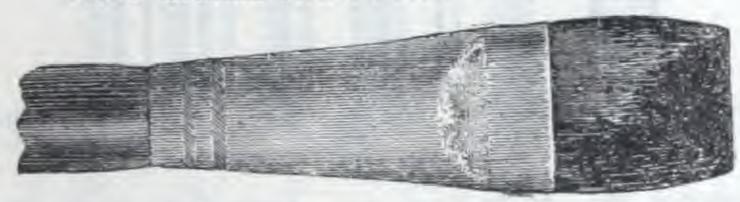
FLAT RUSSIA SABLE GROUNDING BRUSHES



3/6 in	doz	\$2.00	each.	.20	34 in.	,			each,	
1/ 14	41	9.95	64	.25	7/8 "		66	3.00	1.6	.30
3/8 in.					1 "		6.6	3.50	**	.35

In Nickel Ferrules with Polished Handles

FLAT CAMEL HAIR GROUNDING BRUSHES



No. 1. doz., \$1.10 each, .10 | No 5. doz., \$1.60 each, .15

Extra short and thin. In Tin Ferrules with Polished Handles

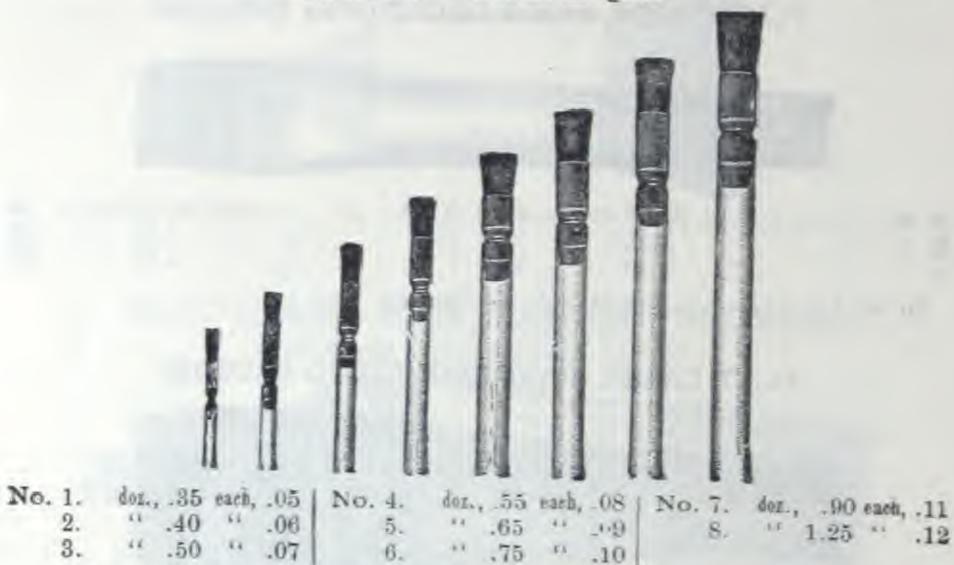
FRENCH FLAT CAMEL HAIR TINTING BRUSHES



No. 2.		doz.,		each,		No. 10		doz.,		each,	
4.	100	11	2.00	11	.20	11	1	11	7.00		.60
6.	*		3.00	11	.25	12. 13	*	64	8.00	11	.70
8,			4.00		100	10					000

In Tin Ferrules with White Wood Handles

Brushes for China Painting - continued NO. 91 S. FRENCH SQUARE SHADERS, "EXTRA SHORT" Superfine Camel Hair in Quills



Assorted, No. 1 to No. 8 . . gross, \$7.80 dozen, .70

6.

NO. 91. FRENCH SQUARE SHADERS, "REGULAR" Superfine Camel Hair in Quills



No. 1. der., .35 each, .05 | No. 4. doz., .55 each, .08 | No. 7. doz., .90 each, .11 2. 911. .65 " 1.25 " .12 .50 " .07 8. .75 EL 6. .10

Assorted, No. 1 to No. 8 . . gross, \$7.80 dozen, .70

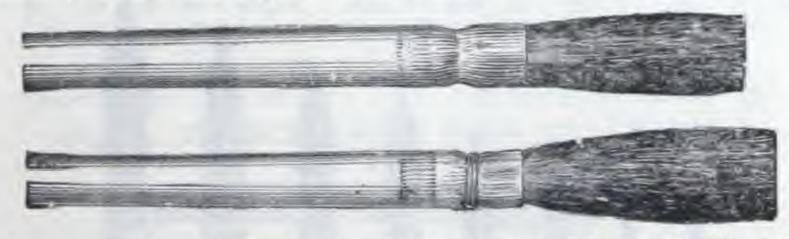
Brushes for China Painting - continued NO. 95. FRENCH SQUARE STRIPERS Superior Camel Hair in Quills



doz., .35 each, .05 | No. 4. doz., .55 each, .08 | No. 7. doz., .90 each, .11 No. 1. " 1.25 " .12 .50 " .07

Assorted, No. 1 to No. 8 . gross, \$7.80 dozen, .70

NO. 97. FRENCH SQUARE SHADERS, "EXTRA LARGE"



No. 10. doz., \$1.70 each, .15 | No. 11. doz., \$1.95 each, .20 | No. 12. doz., \$2.30 each, .25

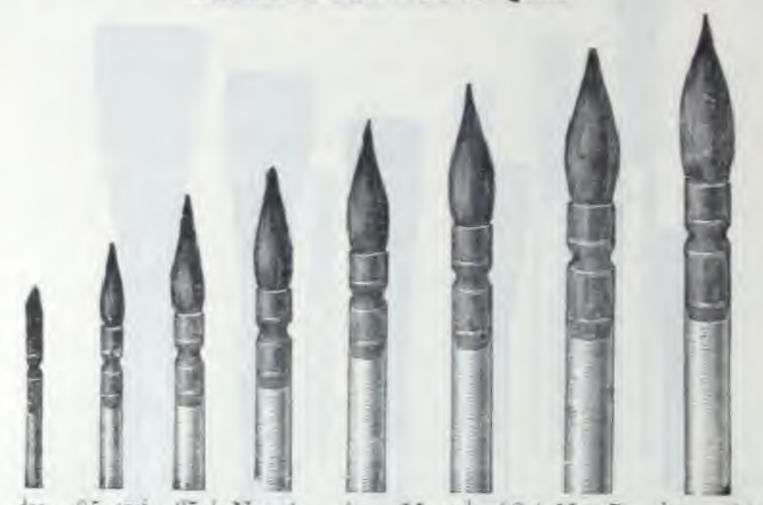
RED SABLE LINERS Black, Polished Handles, Nickle Plated Ferrules

No. 2. doz , \$1.90 each, .20 | No. 5. doz., \$3.00 each, .30 No. 0. doz., \$1.70 each. .20 6. " 3.60 " .35 . 2.20 . .25 1. " 1.70 " .20 .25

Brushes for China Painting — continued

NO. 90 Ex.S. FRENCH POINTED BRUSHES, "EXTRA SHORT"

Superfine Camel Hair in Quills



Assorted, No. 1 to No. 8 . gross, \$7.80 dozen, .70

NO. 90 S. FRENCH POINTED BRUSHES, "SHORT"
Superfine Camel Hair in Quills



No. 1. doz., .35 rach, .05 No. 4. doz., .55 rach, .08 No. 7. doz., .90 rach, .11 2. '' .40 '' .06 5. '' .65 '' .09 8. '' 1.25 '' .12 3. '' .50 '' .07 6. '' .75 '' .10

Assorted, No. 1 to No. 8 . gross, \$7.80 dozen, .70



NO. 96. FRENCH CAMEL HAIR CUT LINERS



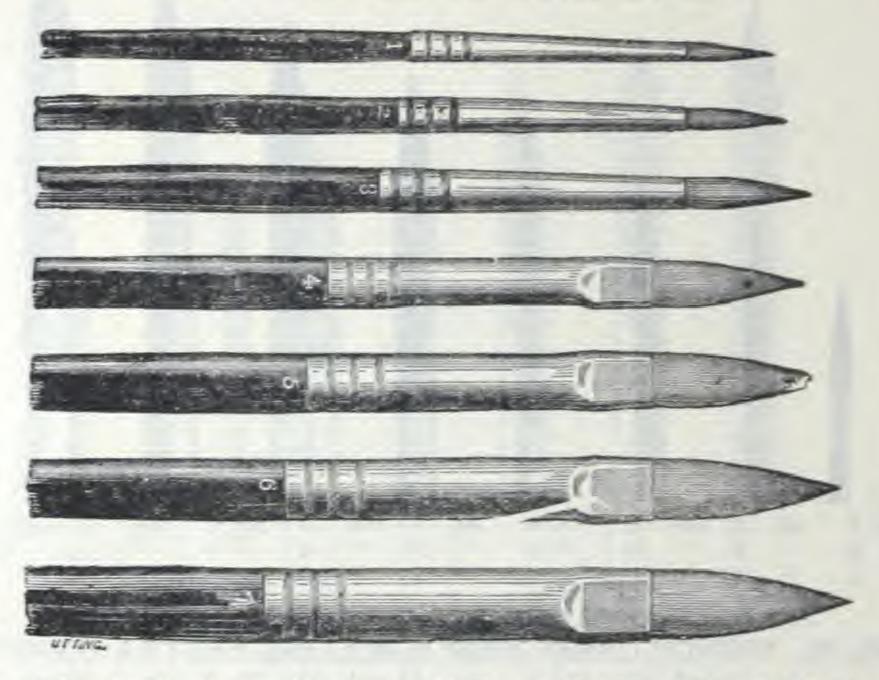
NO. 99, SQUARE - FITCH HAIR STIPPLERS - NO. 100, SLANTING For Blending. Wire-Bound Quills



FROST & ADAMS CO.'S

ENGLISH SIZE RED SABLE WATER COLOR BRUSHES

Round, Polished Walnut Handles, Albata Ferrules



No. 0. doz., \$2.00 each, .20 | No. 3. doz., \$3.25 each, .35 | No. 6. doz., \$6.25 each, .65 |

FROST & ADAMS CO.'S

FRENCH SIZE RED SABLE WATER COLOR BRUSHES

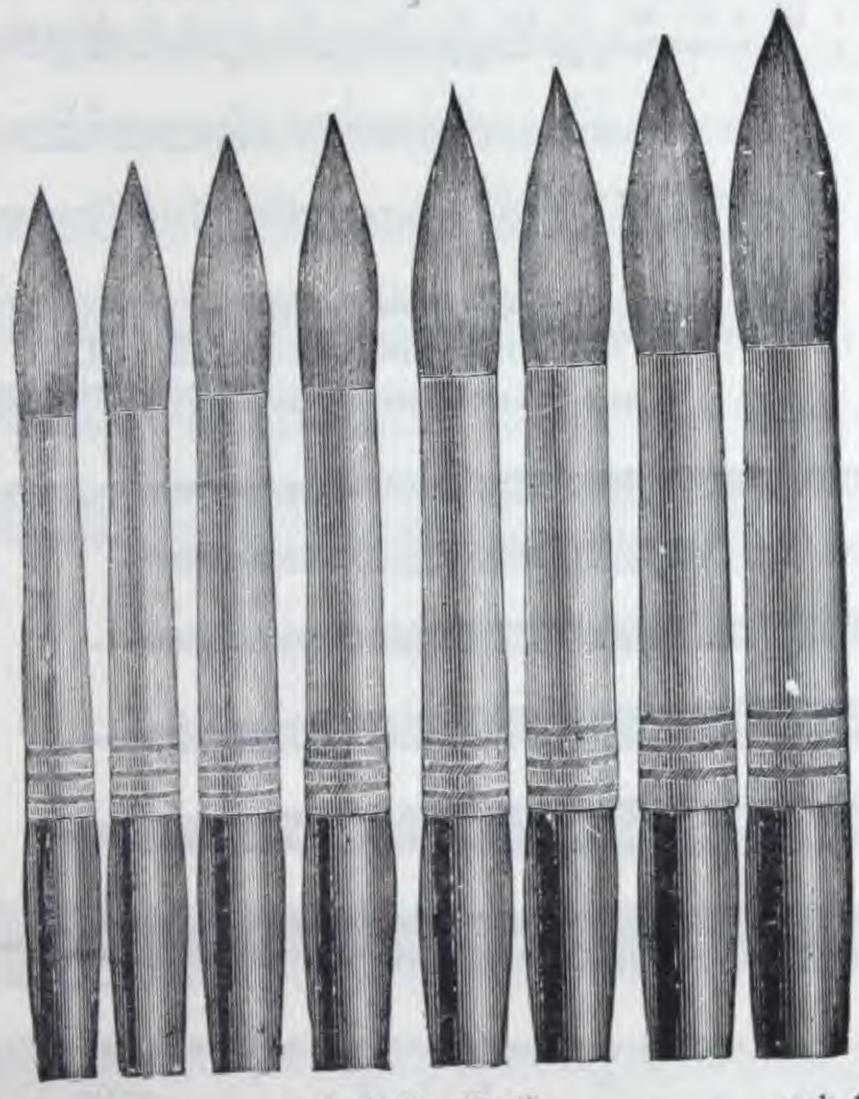
Round, Polished Black Handles, Nickel Plated Ferrules

No. 0. doz., \$1.00 each, .1	5 3.60	.35	10. " 8,25 " .85
2. '' 1.30 '' .1 3. '' 1.90 '' .2		** .60	11. " 10.00 " 1.00 12. " 12.00 " 1.20
Assorted, No.	1 to No. 6		doz., \$2.55

FROST & ADAMS CO.'S

EXTRA LARGE RED SABLE WATER COLOR BRUSHES

Round, Black Polished Handles, Albata Ferrules



No. 13.			each, \$1.00	No. 17.	16		each,	\$1.95
14	301		1.15				**	2.25
15			1.40	2 00			3.6	2.50
15.	*	-	 " 1.65	20.			*4	2.90

RED SABLE LETTERING PENCILS IN QUILLS

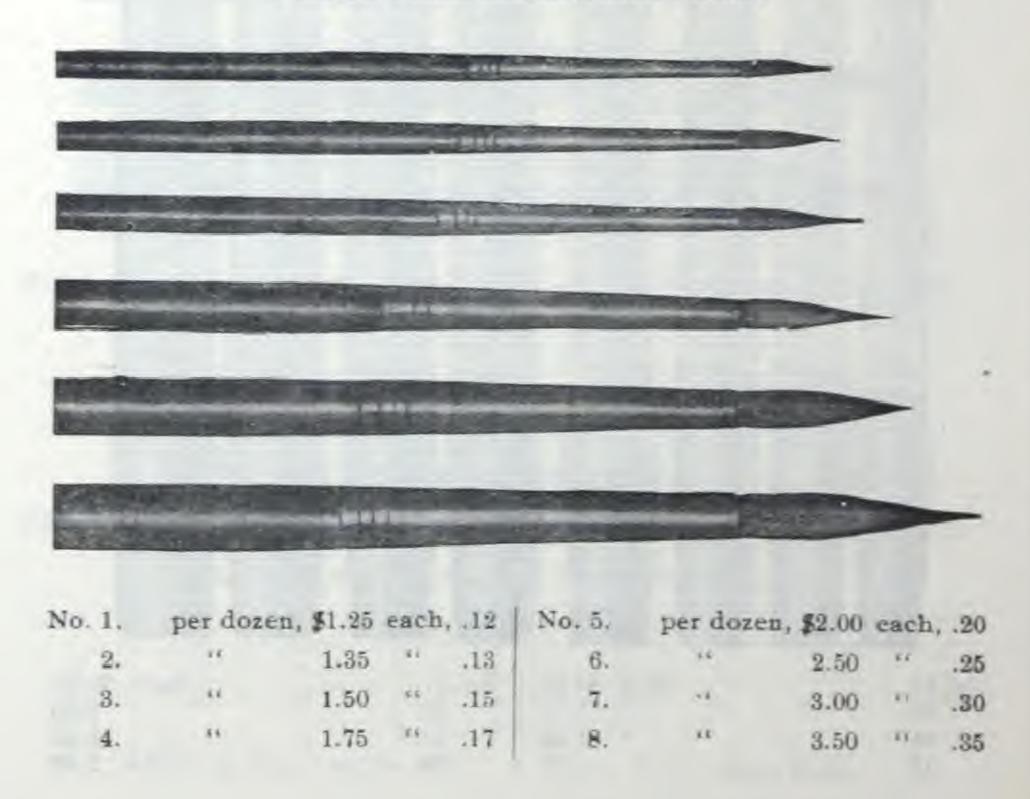
Rose Silk and Gold Thread Binding

Hair, 14, 1, 11% and 114 inches long

No. 1.	Hair,	34	inch,	doz.,	.85	each,	.10	No.	5.	Hair,	11/8	meh,	doz.,	\$4.15	each,	.32
							.12							5,60		
3.	43	1	21	24	2.30	86	.18		7.	39	114	48	y'x	6.95	1.5	.54
4.	4.1	1	19	38	3.10	100	.26		8.	44	1,4	10	24	8.00	14	.66
	1	Ass	orte	1, N	os. 1	to N	0.8			pe	r de	ozen	. \$4.	15		

FROST & ADAMS CO.'S IMITATION W.C. RED SABLE BRUSHES, ROUND

Polished Walnut Handles, Albata Ferrules



HARDTMUTH'S

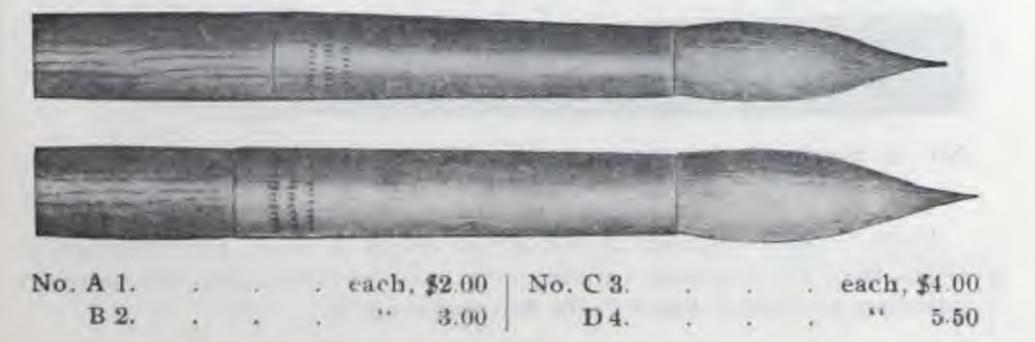
VIENNA RED SABLE, WATER COLOR BRUSHES

Made of the Finest Quality Red Sable Hair, Cocoa Handles, Nickel Ferrules



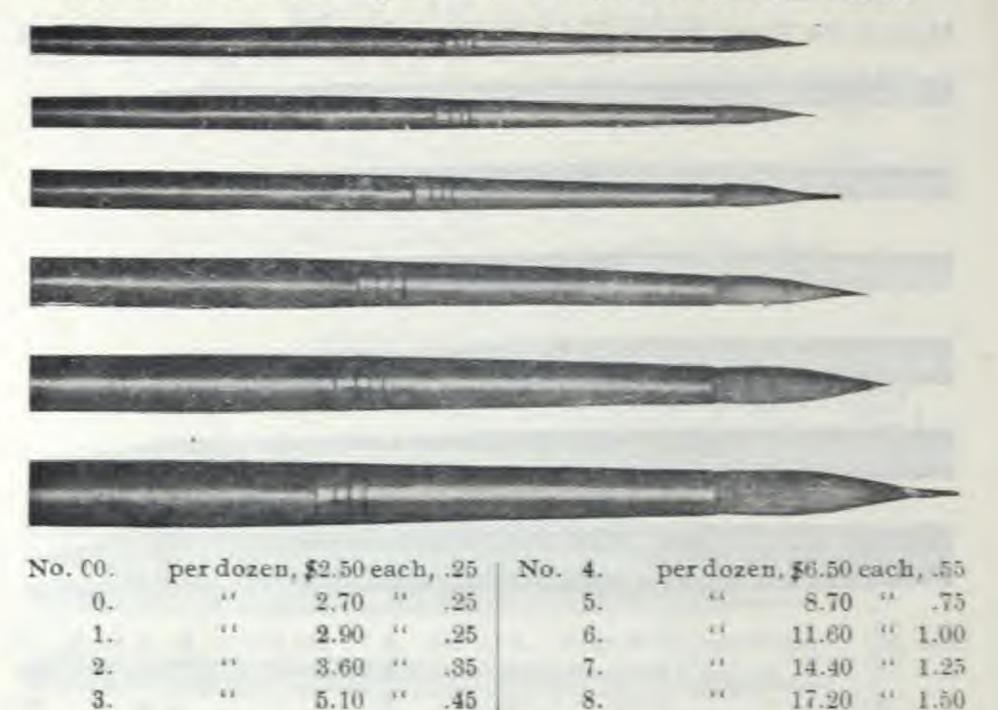
No. 00.	per doze	n, \$1.80 e	each	, .20	No.	4.	per dozen	, \$5.30	eacl	1, .45
0.	**	2.00		.20		5.	1.1	7.20	.11	.60
1.	110	2.20	a	.20		6.	6.6	9.60	11	.80
2.	44	2.90	1.1	.25	-	7.	er.	11.60	14	1.00
3.	88	4.10	11	.35		8.	6.6	14.40	36	1.25

EXTRA SIZE VIENNA RED SABLE BRUSHES

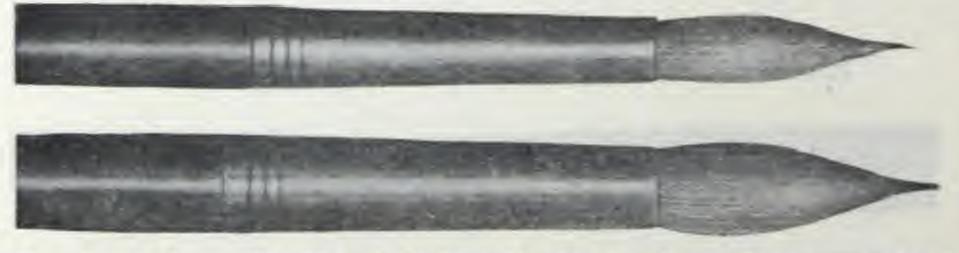


HARDTMUTH'S "KOH-I-NOOR" RED SABLE BRUSHES

For Water Color Painting. Genuine Ebony Handles, Albata Ferrules



EXTRA SIZE "KOH-I-NOOR" RED SABLE BRUSHES



No. 9. per dozen, \$20.20 each, \$1.75 | No. 11. per dozen, \$26.00 each, \$2.50 10. " 28.30 " 2.00 12. " 31.60 " 3.00

Note. - These Brushes are made of selected stock, and stamped in Gold, with the registered trade mark, "Koh-i-noor," and are, without question, the finest Water Color Brushes made

WINSOR & NEWTON'S BRITISH RED SABLE BRUSHES

Black Walnut Handles, Nickeled Ferrules, Round and Flat



BRITISH RED SABLE BRUSHES

Extra Large Series with 9 inch Polished Walnut Handles, Round

No. 1.		each, \$1.50	No. 3.		each, \$3.20
2.		1 2.25	4.	10.1	4.50

WINSOR & NEWTON'S

BRITISH BROWN SABLE BRUSHES

Black Walnut Handles, in Nickled Ferrules

No. 00. doz.,	\$3.30 each, .30	No. 2. doz., \$4.20	each, .35	No. 5. doz.,	\$7.80 each, .65
		3. 5.40			
1. "	3.60 " .30	4. " 6.60	.55	7. 14	18.20 " 1.10

W. &. N. POCKET RED SABLE SKETCHING BRUSH



Pocket Sketching Brush, very convenient for outdoor sketching each, .35

WINSOR & NEWTON'S FINEST BROWN WATER COLOR SABLE BRUSHES

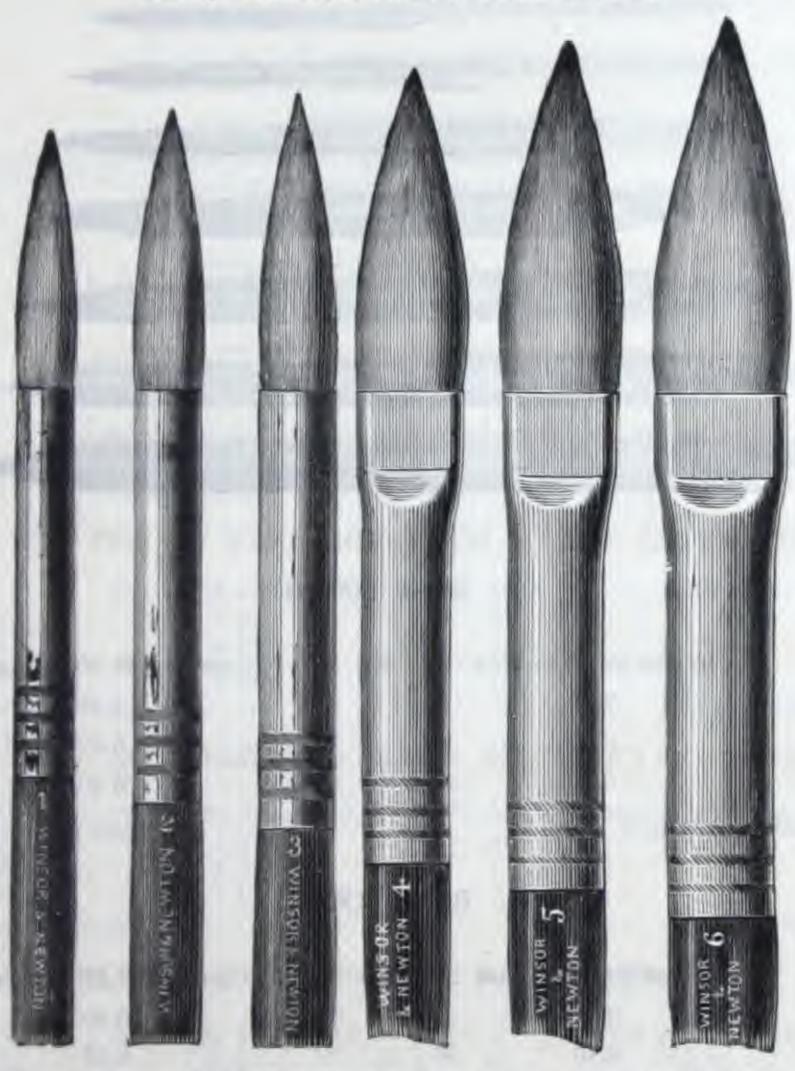
Ebony Handles, in Albata, Round and Flat



WINSOR & NEWTON'S

EXTRA LARGE SERIES, FINEST BROWN OR RED WATER COLOR SABLE BRUSHES

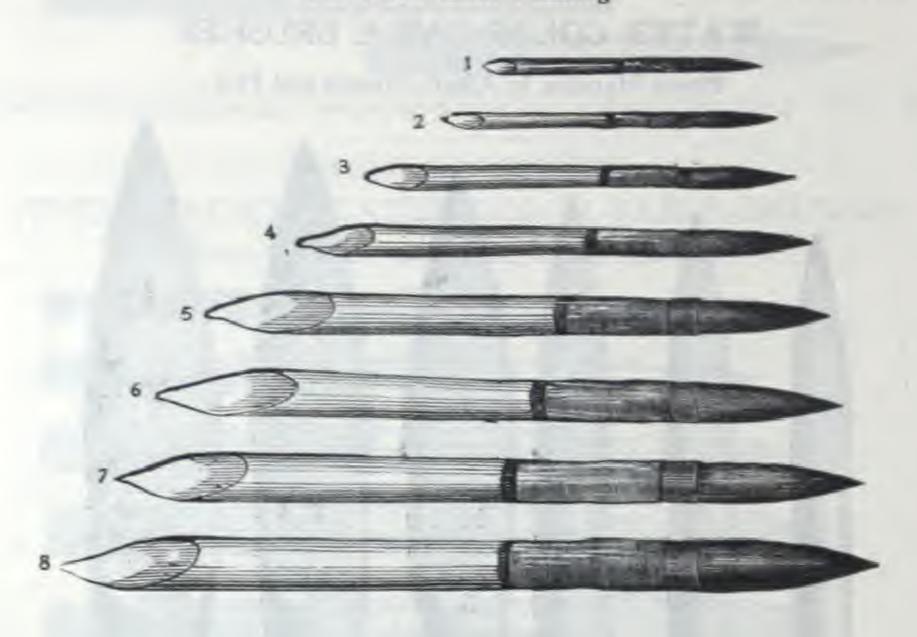
Ebony Handles, In Albata, Round and Flat



No. 1.	Brown	each,	\$3.20	Red	\$1.80	No. 4.	Brown	each,	\$7.00	Red	\$4.80
2.	16						26				
0	100	-66	5.40	10	3 60	R	5.6	86	10.95	3.6	7.90

CAMEL HAIR MINIATURE PENCILS

For Water Color Painting



157. ROSE BOUND

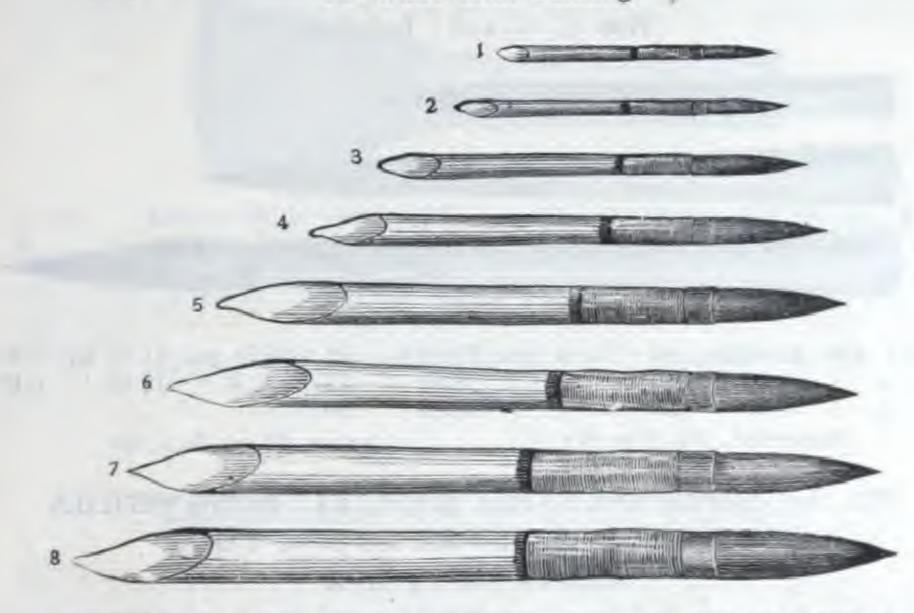
No. 1.	- 5	per gross	\$2.60	per doze	. 25	No. 5.		per grow	, \$4.60	per done	1, .40
2.		-17	2.80	,776	-25	Ĝ.		46	5.40	ir	.50
3.		11	3.20	Tie	.30	7.	*	148	6.00	is.	.55
4.	. +	-10	3,60	10	.35	8.		10	6.40	-0	.60
Assorte	d, N	os. 1 to	8 .		14	. 1			per g	ross,	3.80

162. BLUE BOUND

No. 1.	10	per gros	\$3.00	per doze	1, .30	No. 5.		per gres	s, \$5.00	per dozi	1, .45
2.	13	10	3.20	44	.30	6.		EL	5.60	.0	.55
3.		49	3.40	11	.35	7.	-	s/h	6.20	×c	.60
4.		- 16	3.60	- 11	.40	8.		1.0	6.80	4.0	.65
Assorte	d, N	los, 1 to	8 .	+	4	2 2	4		per g	ross,	\$4.40

CAMEL HAIR MINIATURE PENCILS

For Water Color Painting



178. YELLOW SILK AND SILVER BOUND, EXTRA FINE

No. 1.		per gross,	\$3.40	per dozen,	.40	13	No. 5.	per gross	\$6.00	per dozer	, 50
2.		- 11	3.80	31	.40		6.	4.0	7.20	11	.60
3.		6.1	4.40	1.6	.40	1	7.	16	8.40	11	.75
4.	150	11	4.80	100	.45		8.	- 11	9.60	116	.85
Assorted	1, N	os. 1 to	8 .	*		-		*	per g	ross, \$	5.40

182. BLUE SILK AND SILVER BOUND, EXTRA FINE

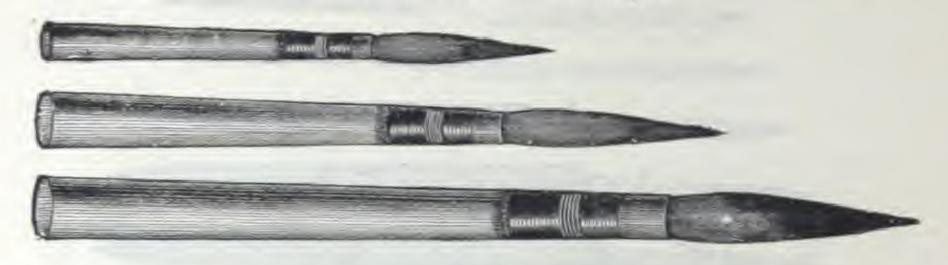
No. 1.		per gross,	\$3.60	per doze	n, .40	No. 5.		per gros	s, \$6.80	per doze	n, .60
2.		11	4.00	10	.40	6.	×	10	8.00	4.1	.70
3.		11	4.80	- 11	.45	7.	5.	10	9.60	11	.80
4.		11	5.40	3.0	.50	8.	+	110	10.80	44	.90
Assorter	I. N	los, 1 to	8 .	0	13.1	3 1 4	4	1 3	per g	ross,	\$6.00

196. RED SILK AND GOLD BOUND, SUPERFINE

No. 1.	-	per gross	\$4.40	per deze	n, .40	No. 5.	per gross.	\$11,20	per dozen	\$1.00
2.	-	- 11	5.40	EE.	.45	6.	 W	12.60	n	1.10
3.	4	100	7.00		.60	* 7.	.46	14.20	11	1.25
4.		0.1	8.00	3.0	.70	8.	41	15.60	5.6	1.35
Assorte	d, N	los. 1 to	8 .	4				. per	gross,	\$8.60

NO. 514. SUPERFINE CAMEL HAIR PENCILS

For Lettering. Bound in Green and Red Silk and Silver Thread Hair 1/2, 1/4 and 1 Inch Long



NO. 516. SUPERFINE CAMEL HAIR LETTERING PENCILS Bound in Green and Red Silk and Silver Thread

Hair, 14 and 11/2 Inches

NO. 518 SUPERFINE CAMEL HAIR STRIPING PENCILS Bound in Green and Red Silk and Silver Thread

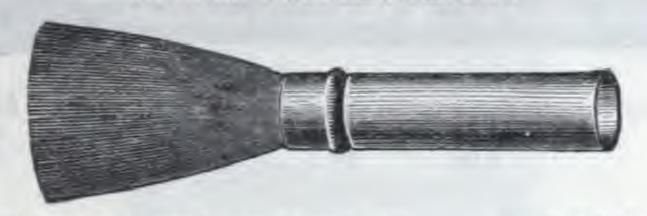
Hair, 134 and 2 Inches Long

NO 520. SUPERFINE CAMEL HAIR STRIPING PENCIL Bound in Green and Red Silk and Silver Thread

Hair, 21/4 and 21/2 Inches Long

CAMEL HAIR SWAN IN METAL TUBES

NO. 464. FOR LETTERING

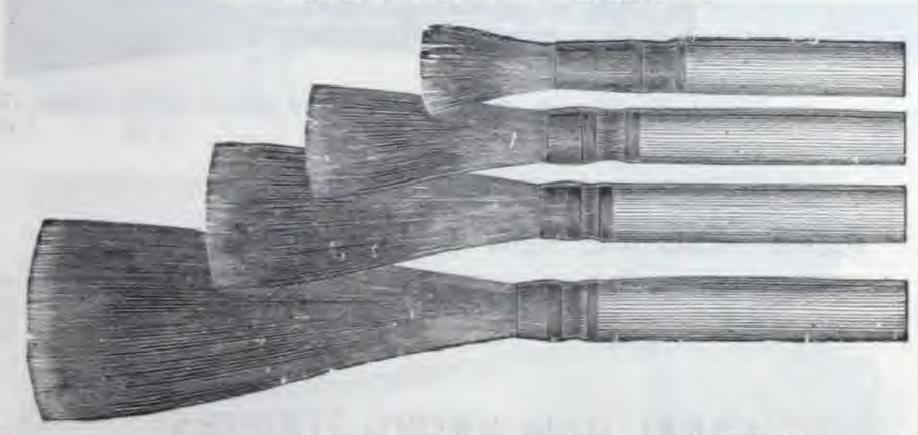


½ in. gross, \$18.40 doz., \$1.55 | 1 in. gross, \$20.80 doz., \$1.75

NO. 466. FOR STRIPING

CAMEL HAIR SWAN QUILL PENCILS

NO. 458. FOR LETTERING



½ in. gross, \$10.00 doz., 90 | 1 in. gross, \$13.00 doz., \$1.10 % '' 11.00 '' 1.00 | 1¼ '' ' 14.00 '' 1.25

NO. 460. FOR STRIPING

	in.	gross,	\$15.00	doz.,	\$1.25	1 214	in.	gross,	\$18.00	each,	\$1.50
114	4.6	11	16.00	11	1.35	21/2	1.0	 11	20.00	111	1.75
2	ic	r.c	17.00	16	1.45	1					

CAMEL HAIR LETTERING BRUSHES IN HANDLES

No. 2. per dozen, \$1.30 each, .10 No. 8. per dozen, \$2.65 each, .25 4. '' 1.65 '' .15 10. '' 3.00 '' .25 6. '' 2.00 '' .20 12. '' 3.65 '' .30

OX HAIR LETTERING BRUSHES IN HANDLES



No. 2. per dozen, \$1.30 each, .10 No. 8. per dozen, \$2.65 each, .25 4. " 1.65 " .15 10. " 3.00 " .25 6. " 2.00 " .20 12. " 3.65 " .30

RED SABLE SHOW CARD WRITERS IN HANDLES



No. 2. per dozen, \$2.00 each, .20 | No. 8. per dozen, \$8.70 each, .75 4. 3.60 '' .30 | 10. '' 12.60 '' 1.05 6. '' 6 00 '' .50

FLAT SABELINE SIGN WRITERS IN HANDLES

14 in. per dozen, \$2.00 each, .20 | 34 in. per dozen, \$5.00 each, .45 | 38 '' | 5.00 '' .50 | 36 '' | 5.00 '' .50 | 37 '' | 4.00 '' .35 | 34 '' | 6.50 '' .55

CAMEL HAIR SWORD STRIPERS



No. 0. per dozen, \$1.50 each, .10 | No. 3. per dozen, \$1.80 each, .20
1. 1.60 1.15 | 4. 1.90 1.20
2. 1.70 1.15 | 4.

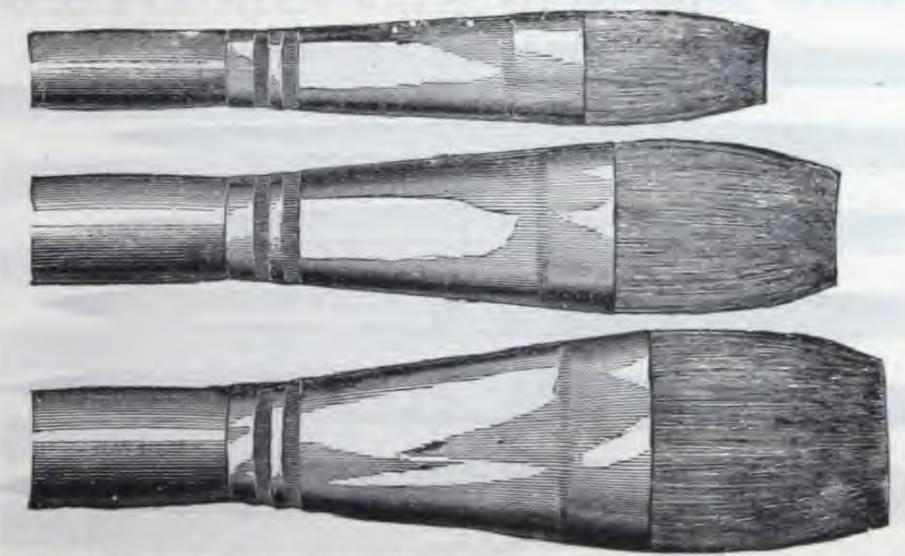
CAMEL HAIR QUILL PENCILS



Superior Quality, Rose Bound, in Glass Top Box, containing 1 gross Assorted Sizes, 1 to 8, and 4 dozen sticks per gross, \$3.60 per dozen, .40

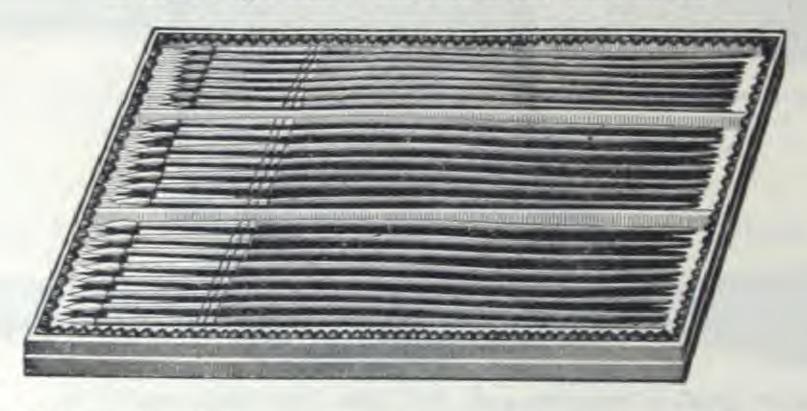
FROST & ADAMS CO.'S CAMEL HAIR LAQUERING BRUSHES

Polished Handles, I in Ferrules Flat



CAMEL HAIR SCHOOL BRUSHES

In Glass Top Boxes Black Handles, Tin Ferrules

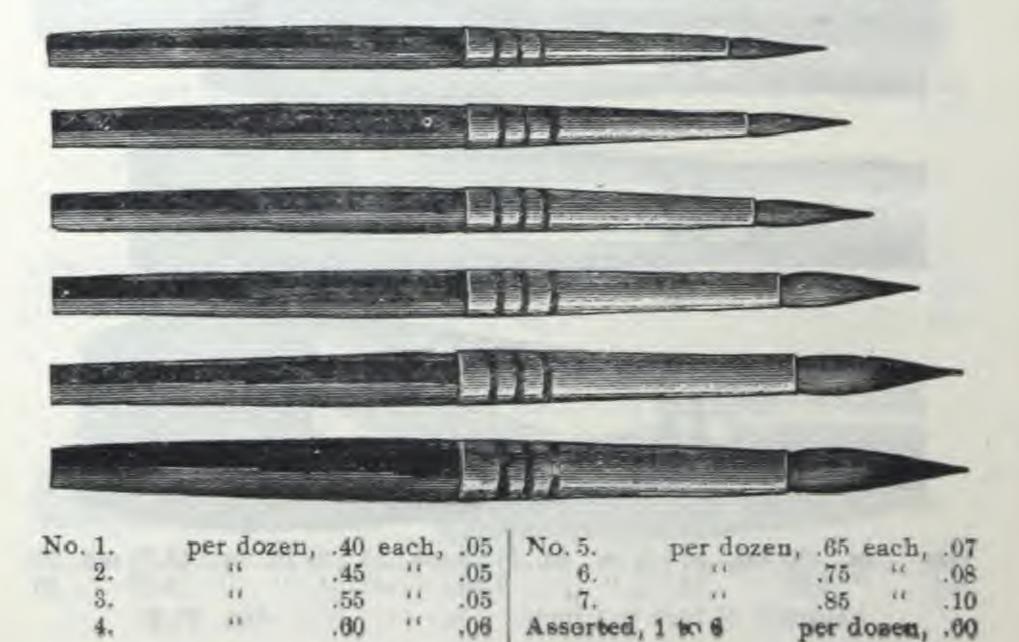


Assorted Sizes, 1 to 6 .

per gross, \$6.00 each, .60

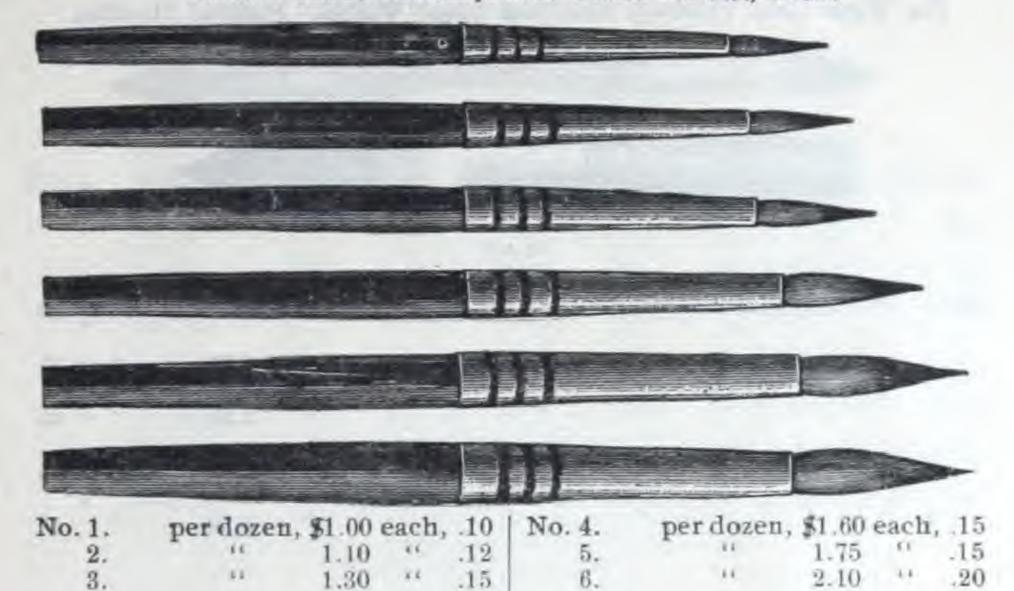
CAMEL HAIR SCHOOL BRUSHES

For Water Color Painting. Red Polished Handles, Tin Ferrules, Round



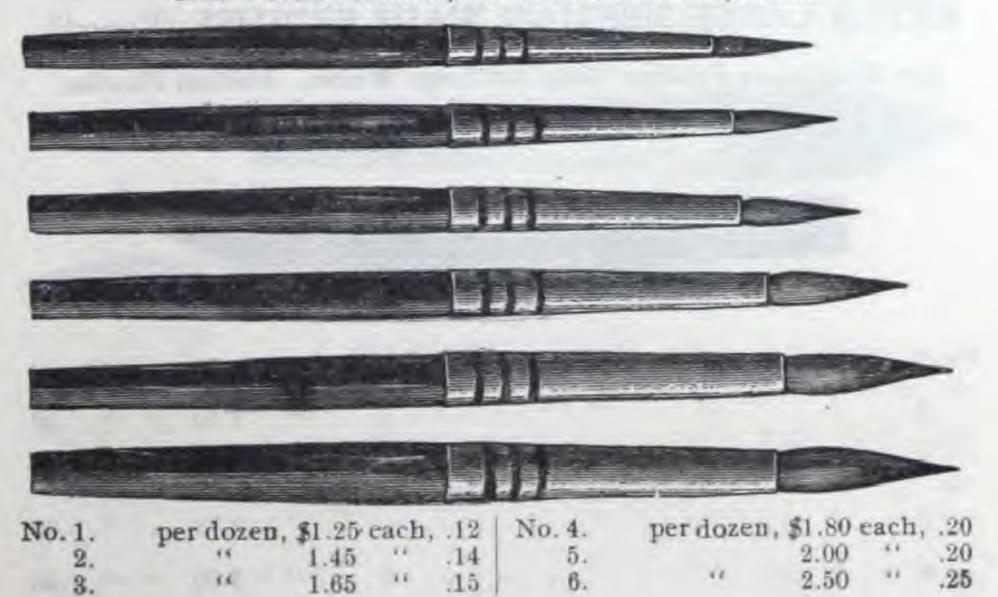
CAMEL HAIR SIBERIAN WATER COLOR BRUSHES

Yellow Polished Handles, Nickel Plated Ferrules, Round



RUSSIA OR FITCH WATER COLOR SABLE BRUSHES

Cedar Polished Handles, Nickel Plated Ferrules, Round



EXTRA LARGE SIBERIAN WASH BRUSHES (Flat)

For Water Color Painting, Skies and Large Washes. Polished Handles,
Nickel Plated Ferrules



FLAT

No. 0.	Flat,	Superfi	ne Quali	ity		-	4.	doz.	\$1.75	each	. 20
1.	10.	-14.	* **	+	*			24	1.75	**	.25
2.	46	9.0	11					67	2.50	35	.30
3.	16	100	**					66	3.50	44	.35
4.	11	44				*	100		4.25	16	.45

EXTRA LARGE SIBERIAN WASH BRUSHES (Round)

For Water Color Painting, Skles and Large Washes. Polished Handles, Nickel Plated Ferrules



ROUND

No. 0.	Round,	Superfine	Quality		+	-	doz.	\$1.50	each	, .20
1.	36	16.			- 1	-	**	1.50	**	.20
2.	100	76	**	*			15	2.00	- 11	.25
3.	44		**		*		**	2.75	ir	.30
4.	42	*1	14	-			**	3.50	**	.35

CAMEL HAIR WASH BRUSHES (Double Ended)

Polished Handles, Nickel Ferrules



ROUND, DOUBLE ENDED

N

lo. 1.	Round, S	Superfine	Quality		 4	doz.,	\$3.00	each	, .25
2.	14		124		9	**	4.00	9.8	.35
3	44	- 11	96	¥		**	5.00	6.6	.40
4.	16	**	12			et	6.00	A4	.45
5.	**		144			***	7.00	6.6	.50
6.	6.6	114	38			- 44	8.00	44	.55
7.		16	44		4	- ii	9.00	13	.60
8		116	110			e	10.00	43	.65

SIBERIAN WASH BRUSHES (Double Ended)

For Water Color Painting, Skies and Large Washes. Polished Handles, Nickel Plated Ferrules



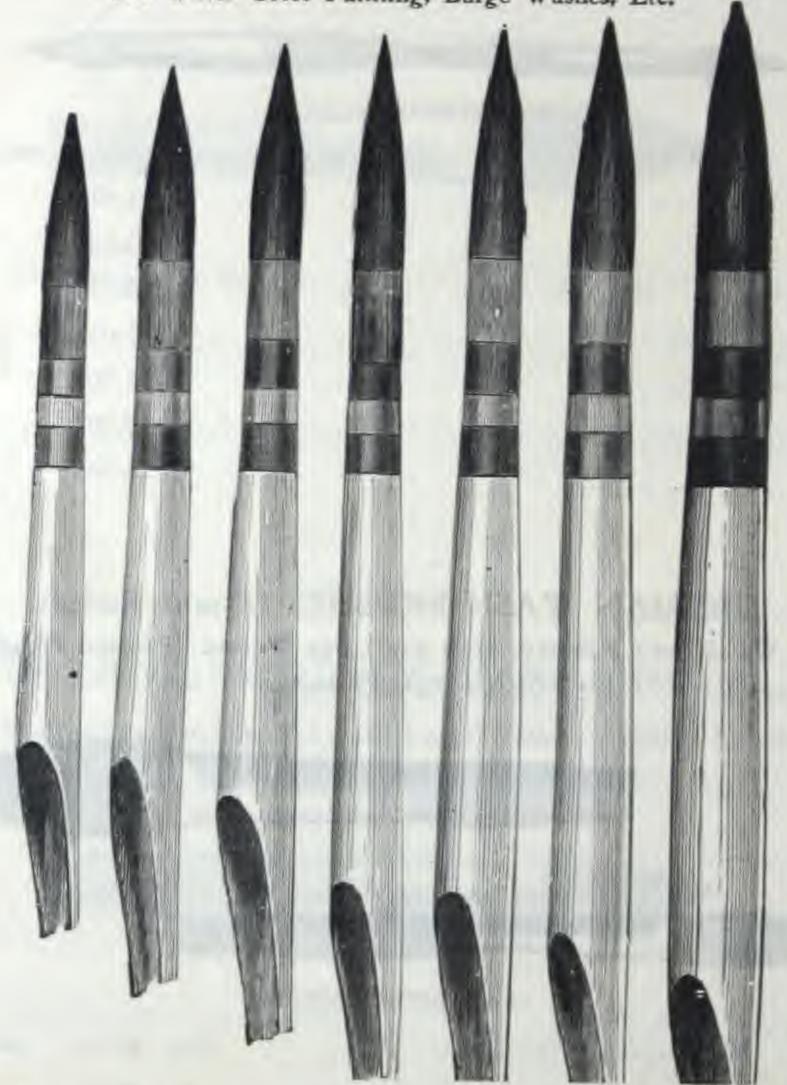


FLAT, DOUBLE ENDED

No. 0.	Flat, S	uperfine	Quality		-	doz.,	\$2.75	each	, .25
1.	**		44			12	3.50	-11	.35
2.	·a.	10	11.	V.		- 61	4.50	11	.45
3.		14	46			16	5.60	64	,55
4.	46	44	**			11	6.80	14.	.65

FRENCH CAMEL HAIR SWAN QUILL PENCILS

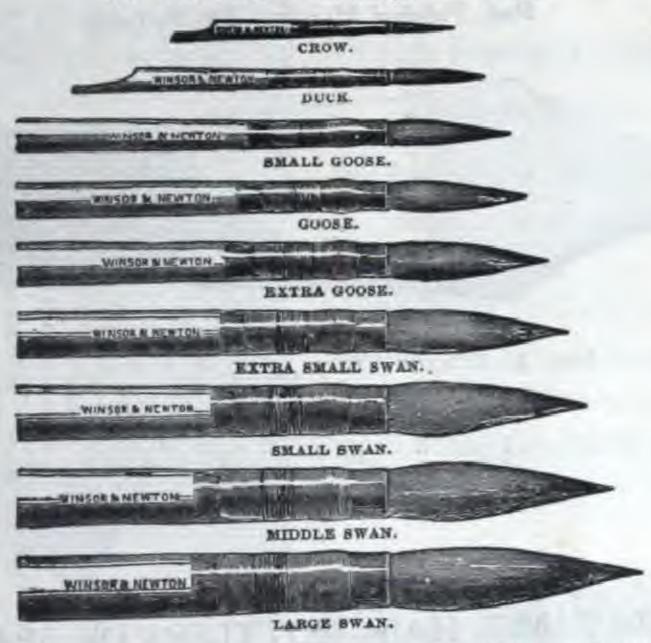
For Water Color Painting, Large Washes, Etc.



No. 00.	Extra large	doz	\$7.50	each,	.75	No. 4.	doz.,	\$2.20	each,	.25
0.		11	6 00		.60	5.	11	1.65		.15
1.	*	44	4.75	44	.45	6.	11	1.15		.10
2.		**	4.00	4.6	.40	7.	*4	.90	- 66	.10
3.		46	2.80	11	20			.00		.10

WINSOR & NEWTON'S FINEST BROWN OR RED SABLE BRUSHES

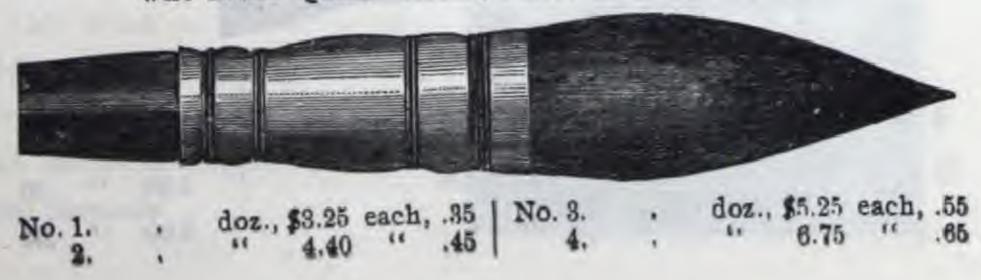
For Water Color Painting. In Quills



Crow Quill	:	each,	.23 .37 .45 .63	Extra Small Swan Qu Small Swan Quill Middle Swan Quill Large Swan Quill	ill,	each,	\$1.50 1.95 2.50 3.50
Extra Goose Quill		11	.85				

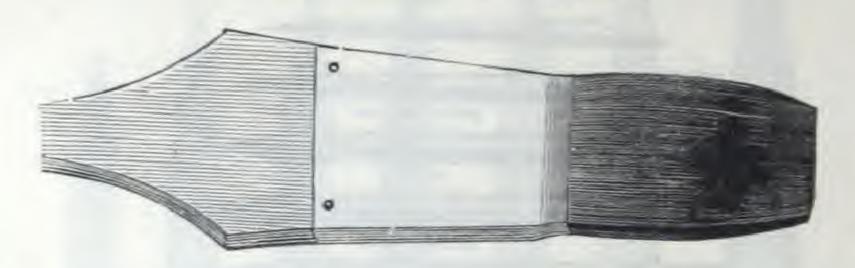
FROST & ADAMS CO.'S SIBERIAN WASH BRUSHES

For Water Color Painting. Skies and Large Washes Wire Bound Quills. Round, Maroon, Polished Handles



FLAT CAMEL HAIR BRUSHES

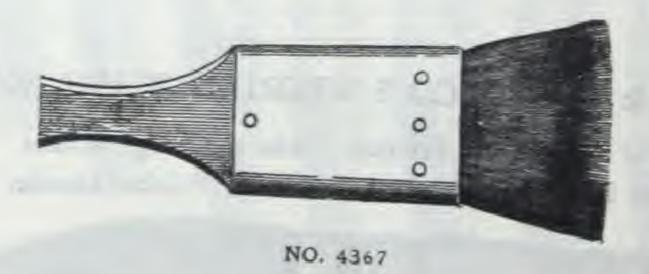
For Water Color Painting, Large Washes Red, Polished Handles, Tin Ferrules



1/2	in, wide	doz.,	\$3.25	each	30	073	n. wide		20 117		
14	311	44.	3.85	W.	95	1,72 1					
	14	22.	44.00		.00	114	15	11	8.15	16	.70
4.	84		4.50	110	.40	2	11				
1,4	11	ri.	5.10	36	.45	-			9.50		.80

GERMAN CAMEL HAIR MOTTLERS OR SPALTERS

For Water Color, Washes or Color Short Cedar Handles, Riveted, Nickel Ferrules



½ i	n. wide	doz.,	\$1.00	each	.10	11% i	n. wide	doz	g1 75		
34	11	ee.	1.25_	11	.12	1%	"				
1	-		1.50				I last		2.25		
			1.00	122	.10	2	····		3.00	15	.25

FLAT CAMEL HAIR BRUSHES



"THE COLUMBIA" BRUSH Red Handles

No. 4366. 1 in. wide, 1 doz. on a card doz., \$2 00 each, .20

This Brush can be used for Varnishing or Lacquering, Dusting Dry Plates and Phonograph Films, and for all household and practical purposes

"THE PERFECT" BRUSH Green Handles

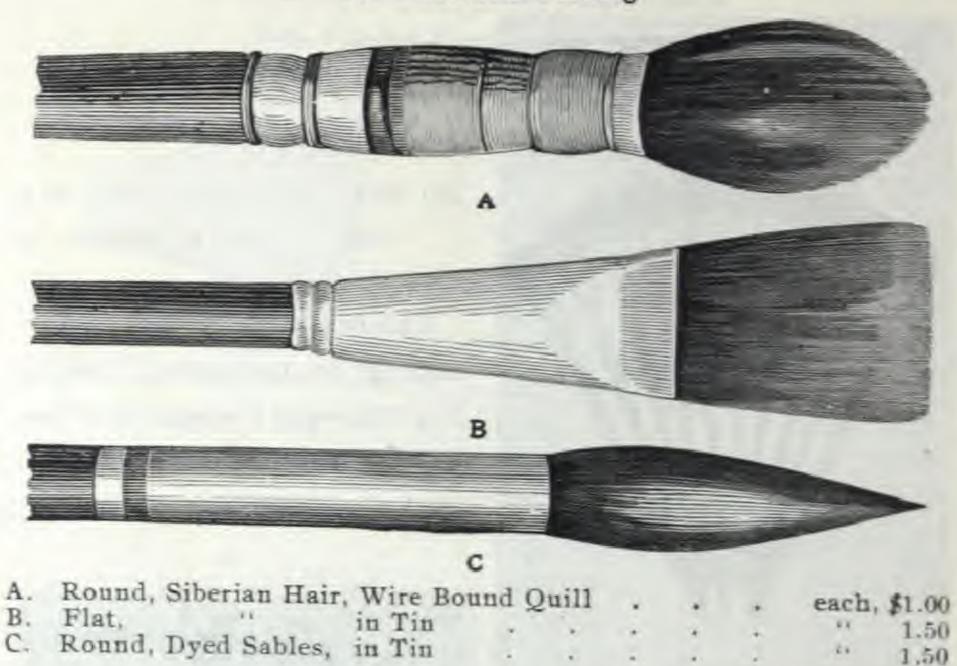
No. 4564. ½ in. wide, 1 doz. on a doz., \$1.50 each, .15

This Brush can be used for Varnishing or Lacquering, Dusting Dry Plates and Phonograph Films, and for all household and practical purposes

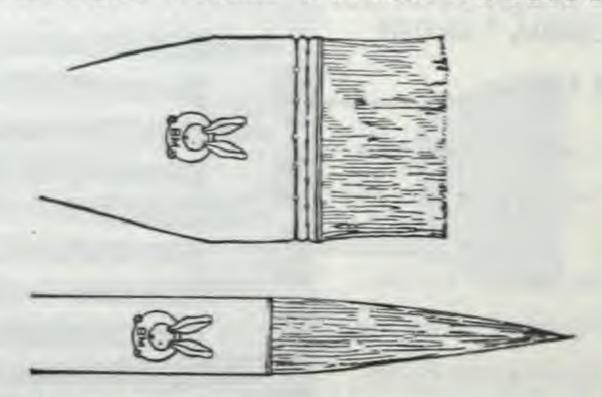


WINSOR & NEWTON'S SKY OR WASH BRUSHES

For Water Color Painting



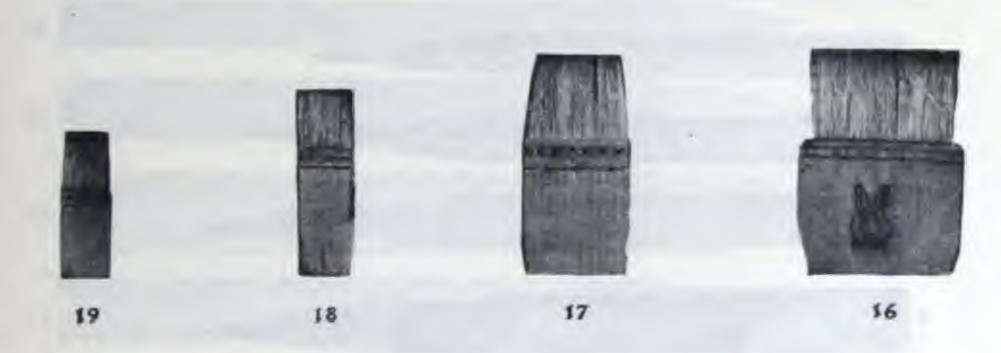
IMPORTED JAPANESE WATER COLOR BRUSHES



DIRECTIONS FOR USING THE BRUSHES

Before and after you use the brush rinse it in clear water in a good sized bowl, but do not wash with fingers or rub against bowl

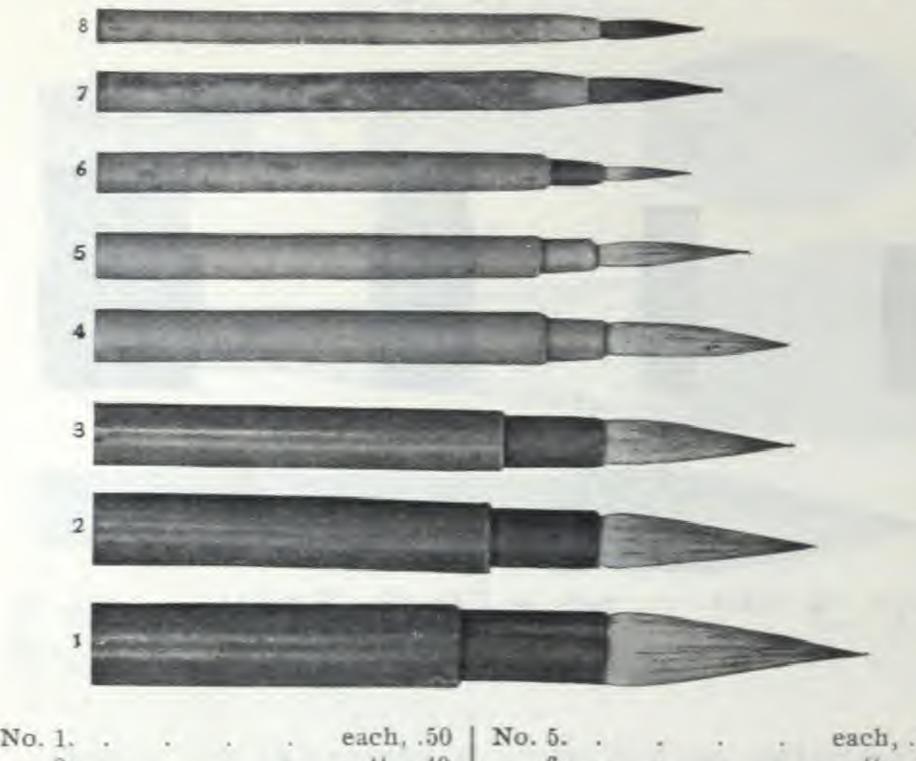
Imported Japanese Water Color Brushes-continued



No. 15 is our celebrated School Brush which cannot be equalled in merit and price, and is extensively used in the public schools in this country. There are already worthless imitations.

Nos. 16, 17, 18 and 19. The Hake or Flat Brush for general washwork is one of the most important brushes used in Japanese water color work

Imported Japanese Water Color Brushes - continued



No. 1.				each,	.50	No. 5.	-		each,	.25
2.		-		11	.40	6.		4	EL	.20
3.				44	.30	7.	-	i	46	.30
4.	2		4	- 0.	.30	8.	140	14	66	.25

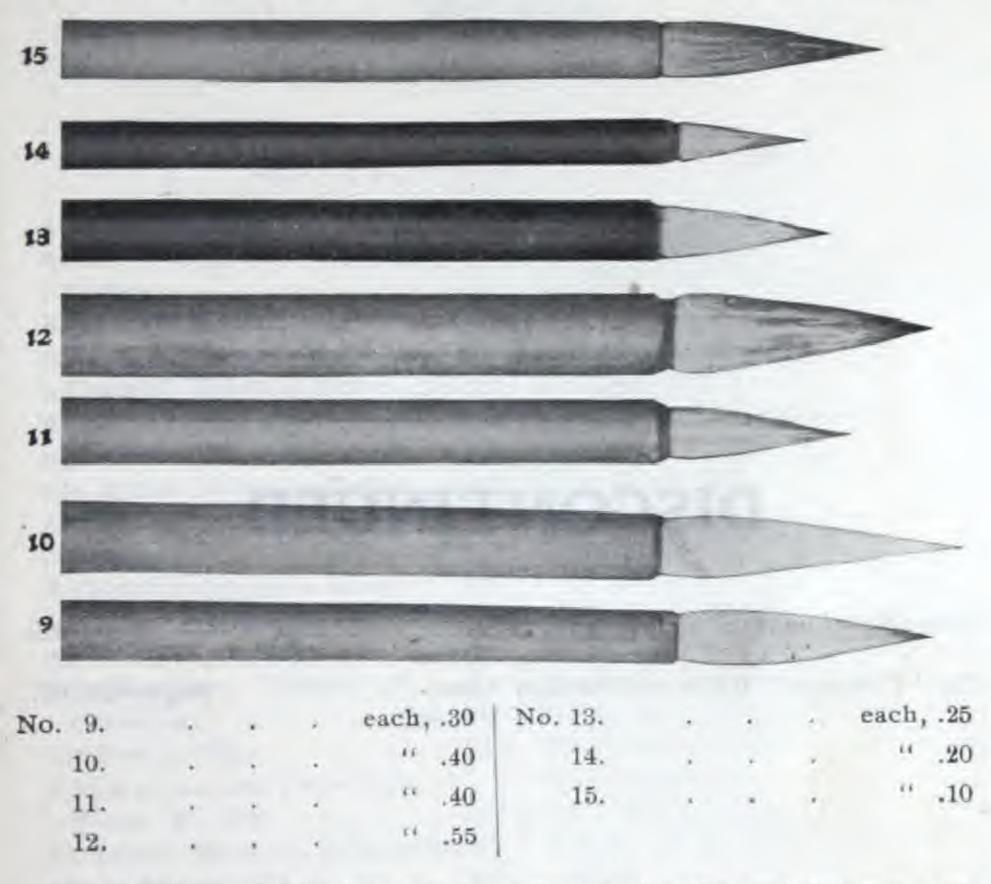
DESCRIPTIVE

Nos. 1, 2 and 3 are called Chinzan Brush; derived its name from that of famous painter about 1780-1820; has a most important place in work of present day because of its practical use in drawing landscapes, flowers, birds, etc.

Nos. 4 and 5 are Korin Brushes, so called from the name of the renowned master of the latter part of the 17th century, who used this style of brush. It is of great value in sketching stems, petals of flowers, etc.

Nos. 6, 7 and 8 are called Menso Brushes, and are generally used in drawing leaf veins, calyx, and pistils of flowers

IMPORTED JAPANESE WATER COLOR BRUSHES



Nos. 9 and 10. Shijio Brushes have long and rather soft bristles, and used by followers of Shijio School. They are very useful for sketching flowers, birds, landscape, etc.

Nos. 11 and 12 the used by famous master Okio Maruyama, are very valuable in retaining paint for a long period, and give beautiful, modulated tones

Nos. 13 and 14. Art School Brushes added new life to the work of Japanese painters. This great brush was invented by the late Kano Hogal and is now one of the most popular brushes in use among the pupils of the Tokio Art School. It has peculiar merit in making thin or broad lines in one stroke

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Oil Color Water Color China

Painting

Crayon
Perspective
Architectural
Mechanical

Architectural Drawing

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Engineers' Level

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STUDIES OF ALL KINDS

